

**ZIMBABWE SCHOOL EXAMINATIONS COUNCIL  
(ZIMSEC)**

**GRADE SEVEN EXAMINATION, 2000.**

**MATHEMATICS**

**089496**

Date: Thursday, 19 October 2000.

Time: 2 hours

**INSTRUCTIONS TO CANDIDATES**

1. Read all the instructions carefully.
2. Do not open this booklet until you are told to do so by the invigilator.
3. Use only an HB pencil for all entries on the answer sheet.
4. When you are told to start, choose one correct answer from the suggested answers and shade it very dark as shown in the examples at the top of the answer sheet.
5. If you wish to change your answer, erase it completely with a pencil rubber and then shade the new choice.
6. If more than one box is shaded for any one answer, that answer will be regarded as wrong.
7. If you do not understand the instructions, ask the invigilator to explain them to you before you start.
8. Answer all the questions on the separate answer sheet provided.
9. Rough paper will be provided.

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**[Turn over**

1.

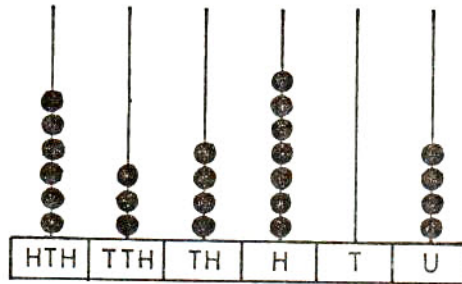


Figure 1

*20/01/2012*  
The number shown on the abacus in Figure 1 is

- A. 73 434.  
B. 634 740.  
C. 643 704.  
D. 634 704.

*14/07/08*

2. Which of the following is a prime number?

- A. 9.  
B. 21.  
C. 37.  
D. 45.

*14/07/08*3.  $\frac{63}{5}$  as a mixed number is

- A.  $6\frac{3}{5}$ .  
B.  $10\frac{3}{5}$ .  
C.  $11\frac{3}{5}$ .  
D.  $12\frac{3}{5}$ .

*14/07/08*

4. 1268 rounded off to the nearest hundred is

- A. 1000.  
B. 1200.  
C. 1270.  
D. 1300.

*14/07/08*

5. 0,2 as a percentage is

- A. 0,2%.  
B. 2%.  
C. 20%.  
D. 200%.

*14/07/08**10/09/09*

6. Arrange the following four decimal fractions in ascending order: 0,4; 0,07; 0,62 and 0,3.
- A. 0,07; 0,3; 0,4; 0,62.  
 B. 0,3; 0,07; 0,4; 0,62.  
 C. 0,3; 0,4; 0,62; 0,07.  
 D. 0,4; 0,62; 0,07; 0,3.
7. 283 cents expressed in dollars is
- A. \$2,83.  
 B. \$28,30.  
 C. \$28,03.  
 D. \$283,00.
8. 2 minutes past twelve midnight in 24hour notation is
- A. 2358.  
 B. 0212.  
 C. 0002.  
 D. 1202.
9. Wilson bought a radio for \$4 000 and later sold it for \$5 000. What profit percent did he make?
- A. 20%.  
 B. 25%.  
 C. 75%.  
 D. 80%.
10.  $0,02 \div 0,4$  is equal to
- A. 0,05.  
 B. 0,5.  
 C. 5.  
 D. 8.

11.

STATION	ARRIVAL	DEPARTURE
Harare	-	1300
Norton	1400	1420
Kutama	1540	1548
Chegut	1605	-

The time table shows the departure and arrival times of a train. How long does the train take to travel from Norton to Kutama?

- A. 1 hr 20 mins.  
 B. 1 hr 28 mins.  
 C. 1 hr 40 mins.  
 D. 1 hr 48 mins.

12. If the mass of one book is 68g, the mass of 70 books in kilograms is

- A. 4,26.  
 B. 4,76.  
 C. 42,6.  
 D. 47,6.

14/07/08

13. Mr Maidza drove a distance of 480km at an average speed of 90km/hr. What time did Mr Maidza take to cover the distance?

- A. 5 hrs 3 mins.  
 B. 5 hrs 20 mins.  
 C. 5 hrs 30 mins.  
 D. 5 hrs 33 mins.

14.

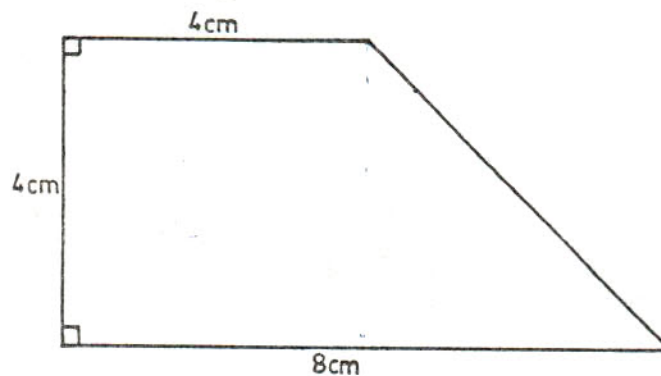


Figure 2

The area of the shape in Figure 2 is

- A.  $16\text{cm}^2$ .  
 B.  $24\text{cm}^2$ .  
 C.  $32\text{cm}^2$ .  
 D.  $48\text{cm}^2$ .

14/07/08

15. Sihle is facing West. If she turns clockwise through 3 right angles, she is now facing

- A. North.  
 B. South.  
 C. East.  
 D. West.

14/07/08

16. 20% of \$3,50 is

- A. \$0,70.  
 B. \$1,40.  
 C. \$1,75.  
 D. \$2,80.

14/07/08

01/06/09

17. If the perimeter of a square is 36cm, then its area is

- A.  $9\text{cm}^2$ .  
 B.  $18\text{cm}^2$ .  
 C.  $72\text{cm}^2$ .  
 D.  $81\text{cm}^2$ .

14/07/08

18. The difference between 901 and 843 is

- A. 58.  
 B. 68.  
 C. 142.  
 D. 158.

14/07/08

19.  $\frac{3}{7}$  is the same as

- A.  $\frac{6}{21}$ .  
 B.  $\frac{6}{14}$ .  
 C.  $\frac{9}{14}$ .  
 D.  $\frac{15}{28}$ .

14/07/08

20.  $1035 - 750 + 93$  is

- A. 192.  
 B. 292.  
 C. 378.  
 D. 478.

14/07/08

21.

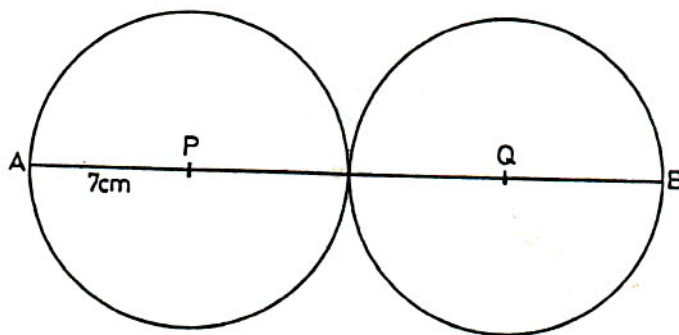


Figure 3

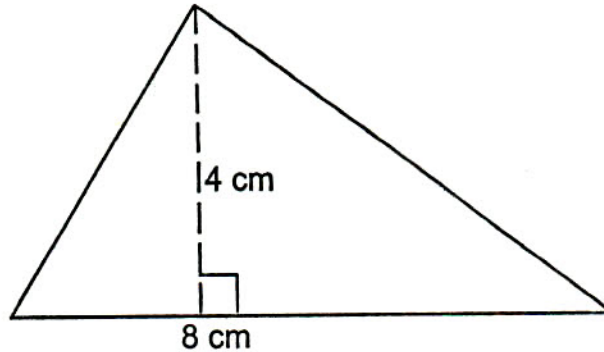
In Figure 3, P and Q are centres of two circles which are equal. If AP is 7cm long then the length of line AB is

- A. 14cm.  
 B. 21cm.  
 C. 28cm.  
 D. 25cm.

14/07/08

22. At Shingayi School each pupil drinks  $\frac{1}{2}$  a litre of milk daily. Each day the school orders 400 litres of milk for the pupils. The number of pupils in the school is
- A. 200.
  - B. 400.
  - C. 600.
  - D. 800.
23. A farmer has 90 animals. 30% are cattle and the rest are goats. The number of goats are
- A. 27.
  - B. 30.
  - C. 63.
  - D. 70.
24. The volume of a cube with sides 4cm long is
- A.  $16\text{cm}^3$ .
  - B.  $24\text{cm}^3$ .
  - C.  $44\text{cm}^3$ .
  - D.  $64\text{cm}^3$ .

25.



**Figure 4**

- The area of the triangle in **Figure 4** is
- A.  $12\text{cm}^2$ .
  - B.  $16\text{cm}^2$ .
  - C.  $24\text{cm}^2$ .
  - D.  $32\text{cm}^2$ .
26. If a bus takes 30 minutes to cover a distance of 25km, then its speed in km/hr is
- A.  $12\frac{1}{2}$ .
  - B. 25.
  - C. 50.
  - D. 55.

27. In a class of 48 children,  $\frac{3}{8}$  play tennis and the rest play volleyball. The number of children who play volleyball is
- A. 16.
  - B. 18.
  - C. 24.
  - D. 30.
28. The average mass of Peter, David and Jacob is 54kg. David's mass is 49kg and Jacob's mass is 52kg. What is Peter's mass?
- A. 47kg.
  - B. 51kg.
  - C. 54kg.
  - D. 61kg.
29. 2 hours 45 mins + 3 hours 50 mins is equal to
- A. 5 hrs 35 mins.
  - B. 6 hrs 25 mins.
  - C. 6 hrs 35 mins.
  - D. 6 hrs 95 mins.
30.  $24 + 3 \times 7$  is equal to
- A. 45.
  - B. 93.
  - C. 171.
  - D. 189.
31.  $\frac{3}{4}$  of a number is 24. What is the number?
- A. 6.
  - B. 8.
  - C. 18.
  - D. 32.
32. By how much is the product of 6 and 4 greater than their sum?
- A. 2.
  - B. 10.
  - C. 14.
  - D. 24.
33. How much does Mr Moyo pay for a bed marked \$350,00 if he is given a discount of 8%?
- A. \$28,00.
  - B. \$322,00.
  - C. \$332,00.
  - D. \$378,00.

34.  Mary, Jane and Ben shared \$84,00 in the ratio 1:2:3 respectively. What is the difference between Ben's share and Mary's share?
- A. \$14,00.
  - B. \$24,00.
  - C. \$28,00.
  - D. \$36,00.
35.  $3\frac{1}{3} \div 2\frac{1}{2}$  is
- A.  $\frac{3}{4}$ .
  - B.  $\frac{14}{15}$ .
  - C.  $1\frac{1}{3}$ .
  - D.  $8\frac{1}{3}$ .
36.  $n \times 7 = 84$ , therefore n is
- A. 12.
  - B. 77.
  - C. 91.
  - D. 588.
37. A retailer bought a pair of shoes for \$150,00. He later sold it for \$205,00. How much profit did he get?
- A. \$45.
  - B. \$55.
  - C. \$155.
  - D. \$355.
38.  $8^2 + 2^3$  is equal to
- A. 15.
  - B. 22.
  - C. 72.
  - D. 105.
39.  The lowest common multiple (L.C.M.) of 6 and 8 is
- A. 2.
  - B. 14.
  - C. 16.
  - D. 24.
40.  $\frac{2}{3}$  of 69 is equal to
- A. 23.
  - B. 46.
  - C. 66. 14
  - D. 72.

41.  $24 - 16 \div 4$  is  
 A. 2.  
 B. 6.  
 C. 10.  
 D. 20.
42.  $4,8 \div 0,6$  is  
 A. 0,08.  
 B. 0,8.  
 C. 8.  
 D. 80.
43. The following numbers are arranged in sequence: 3; 6; 12; 24; \_\_\_\_\_. The missing number in this sequence is  
 A. 26.  
 B. 36.  
 C. 45.  
 D. 48.
44.  $\frac{27}{63}$  expressed in its lowest terms is  
 A.  $\frac{1}{7}$ .  
 B.  $\frac{3}{7}$ .  
 C.  $\frac{9}{21}$ .  
 D.  $\frac{17}{33}$ .

45.

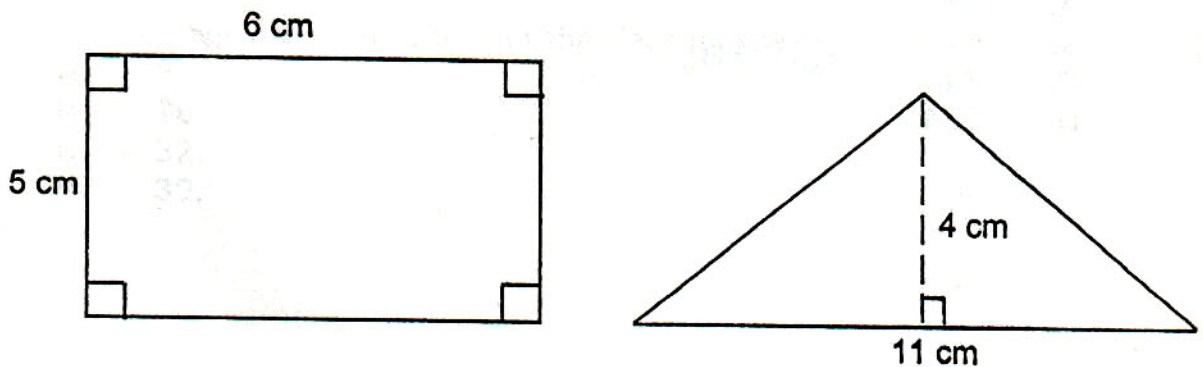
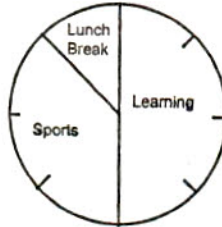


Figure 5

- What is the difference between the areas of the two shapes in Figure 5?
- A.  $8\text{cm}^2$ .  
 B.  $22\text{cm}^2$ .  
 C.  $30\text{cm}^2$ .  
 D.  $52\text{cm}^2$ .

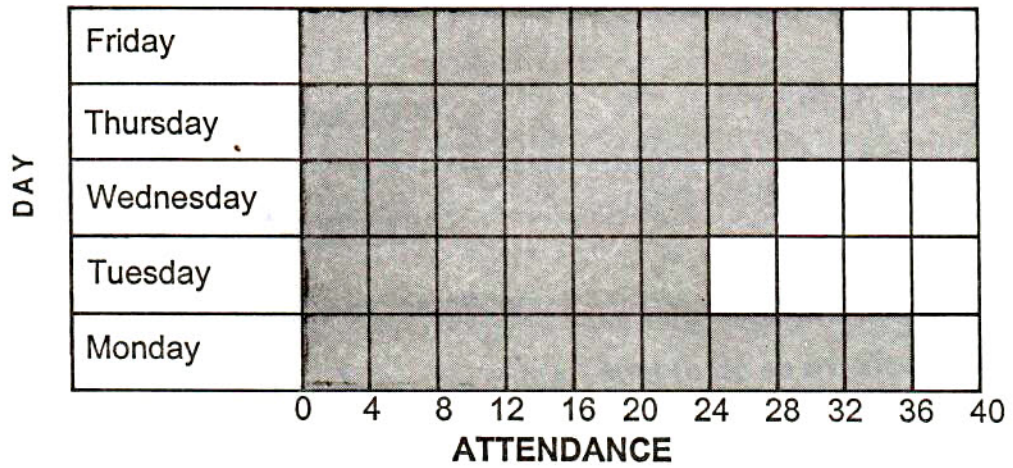
46. A motorcyclist travelling at 60km/hr takes 5 hours to complete a journey. How long will a car travelling at 100km/hr take to travel the same journey?
- A.  $1\frac{2}{3}$  hours.  
B. 3 hours.  
C. 12 hours.  
D. 20 hours.
- 47.



**Figure 6**

- Figure 6** is a pie chart which shows how Tendai spent her day at school. The fraction of the day Tendai spent on sports was
- A.  $\frac{1}{4}$ .  
B.  $\frac{3}{8}$ .  
C.  $\frac{1}{2}$ .  
D.  $\frac{3}{4}$ .
48. The difference between the product of 9 and 11 and the sum of 12 and 13 is
- A. 45.  
B. 57.  
C. 74.  
D. 124.

Use the diagram in **Figure 7** to answer questions 49 and 50.



**Figure 7**

**Figure 7** shows the weekly attendance of a certain class.

49. The total attendance of the class for the week was
- 120.
  - 156.
  - 160.
  - 210.
50. The average daily attendance of the class for the week was
- 24.
  - 28.
  - 32.
  - 39.

**ZIMBABWE SCHOOL EXAMINATIONS COUNCIL  
(ZIMSEC)**

GRADE SEVEN EXAMINATION, 2001.

085289

**MATHEMATICS**

Thursday

25 October 2001.

Time: 2 hours

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3. Use **only** an **HB** pencil for all entries on the answer sheet.
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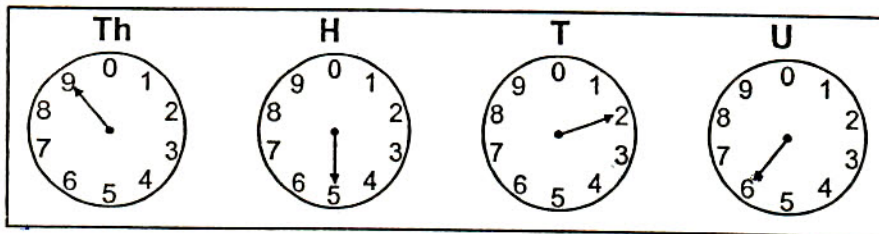
1. 5 276 to the nearest hundred is

- A. 5 000.
- B. 5 280.
- C. 5 300.
- D. 5 376.

2. 7, 625 to the nearest hundredth is

- A. 7,60.
- B. 7,62.
- C. 7,63.
- D. 7,70.

3. What number is represented by the following diagram?



- A. 9,526.
- B. 6 259.
- C. 9 526.
- D. 6,259.

4. 2 007 – 1 998 is equal to

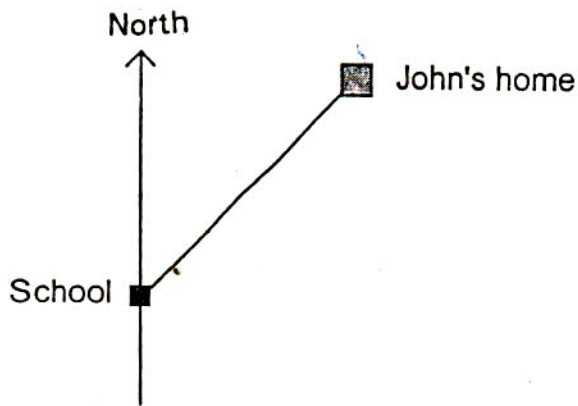
- A. 19.
- B. 15.
- C. 91.
- D. 9.

5. What fraction of 60 minutes is 40 minutes?

- A.  $\frac{5}{6}$ .
- B.  $\frac{3}{4}$ .
- C.  $\frac{1}{3}$ .
- D.  $\frac{2}{3}$ .

6. The number that is exactly divisible by 6 and 9 is
- A. 12.
  - B. 14.
  - C. 36.
  - D. 45.
7. The product of 303 and 7 is
- A. 2 101.
  - B. 2 121.
  - C. 2 031.
  - D. 2 301.
8. A shape with three equal sides is
- A. an isosceles triangle.
  - B. an equilateral triangle.
  - C. a scalene triangle.
  - D. a right angled triangle.
9. A school has 250 pupils. One day 12% of the pupils were absent. How many pupils were present?
- 6/09
- A. 280.
  - B. 88.
  - C. 30.
  - D. 220.
10. What is the sum of 1kg and 5g?
- A. 1 500g.
  - B. 1 005g.
  - C. 1,005g.
  - D. 105g.
11. If  $64 \div 0,08 = 800$  then  $64 \div 0,8 =$
- A. 0,8.
  - B. 8.
  - C. 0,08.
  - D. 80.
12. What is the value of three \$10 notes, two \$5 notes and five 5 cent coins?
- A. \$30,25.
  - B. \$35,25.
  - C. \$38,25.
  - D. \$40,25.

13. The diagram below shows the positions of the school and John's home.



In what direction is the school from John's home?

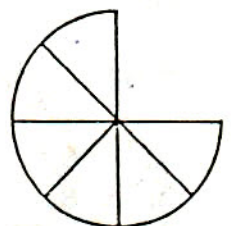
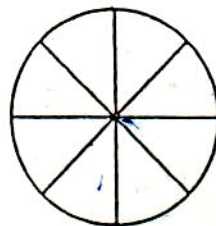
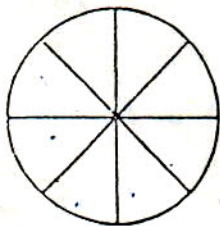
- A. North-East.  
 B. South-West.  
 C. South-East.  
 D. North-West.
14.  $(13 - 3) \times 3$  when simplified is

- A. 36.  
 B. 33.  
 C. 30.  
 D. 4.

15.  $\frac{27}{45}$  in its lowest terms is

- A.  $\frac{3}{5}$ .  
 B.  $\frac{6}{9}$ .  
 C.  $\frac{9}{5}$ .  
 D.  $\frac{2}{5}$ .

16. The diagrams below represent cakes.



What is the number of cakes as a mixed number?

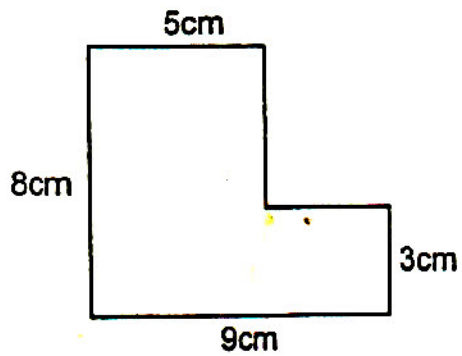
- A.  $3\frac{1}{2}$ .  
 B.  $3\frac{1}{4}$ .  
 C.  $2\frac{3}{4}$ .  
 D.  $1\frac{6}{8}$ .

17. 9 205 cents expressed in dollars is
- A. 0,920.
  - B. 9,205.
  - C. 92,05.
  - D. 920,5.
18. 24% expressed as a fraction in its lowest terms is
- A.  $\frac{24}{50}$ .
  - B.  $\frac{6}{25}$ .
  - C.  $\frac{1}{4}$ .
  - D.  $\frac{3}{25}$ .
19.  $0,50 - 0,45$  is equal to
- A. 0,40.
  - B. 0,05.
  - C. 0,55.
  - D. 0,95.
20.  $96 \times 3$  is equal to
- A. 93.
  - B. 99.
  - C. 278.
  - D. 288.
21.  $4,8 \div 0,6$  is equal to
- A. 0,08.
  - B. 0,8.
  - C. 8.
  - D. 80.
22. Dividing the product of 6 and 30 by 5 gives
- A. 180.
  - B. 150.
  - C. 36.
  - D. 30.
23.  $725 - 36$  is equal to
- A. 761.
  - B. 689.
  - C. 699.
  - D. 711.

[Turn over

24.  $109 + 492 - 1$  is equal to
- A. 602.
  - B. 601.
  - C. 600.
  - D. 500.
25.  $109 \div 9$  is equal to
- A. 9 remainder 4.
  - B. 10 remainder 3.
  - C. 11 remainder 2.
  - D. 12 remainder 1.
26.  $23,15 + 4,2 + 0,012$  is equal to
- A. 2,747.
  - B. 23,582.
  - C. 27,362.
  - D. 65,262.
27. In a school of 1 005 children,  $\frac{1}{3}$  were girls. The number of boys was
- A. 201.
  - B. 402.
  - C. 603.
  - D. 804.
28. If  $\frac{2}{3}$  of a number is 24, then  $\frac{1}{3}$  of that number is
- A. 8.
  - B. 12.
  - C. 16.
  - D. 18.
29.  $\frac{7}{3} \times \frac{7}{2} \div \frac{7}{2}$  is equal to
- A.  $28\frac{7}{12}$ .
  - B.  $\frac{4}{21}$ .
  - C.  $\frac{3}{7}$ .
  - D.  $2\frac{1}{3}$ .

30. What is the area of the shape below?



- A.  $27\text{cm}^2$ .
- B.  $40\text{cm}^2$ .
- C.  $52\text{cm}^2$ .
- D.  $67\text{cm}^2$ .

31. Janet got the following marks in each of the four subjects:

Subject	Mark
Mathematics	$\frac{15}{20}$
English	$\frac{16}{25}$
Ndebele	$\frac{29}{50}$
General Paper	$\frac{39}{100}$

Her highest mark was

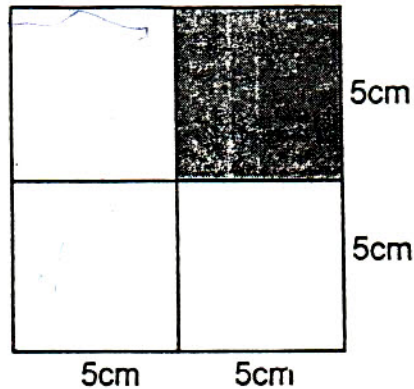
- A.  $\frac{39}{100}$ .
- B.  $\frac{16}{25}$ .
- C.  $\frac{29}{50}$ .
- D.  $\frac{15}{20}$ .

32.  $52 + 5,2$  is

- A. 1.
- B. 10.
- C. 100.
- D. 1 000.

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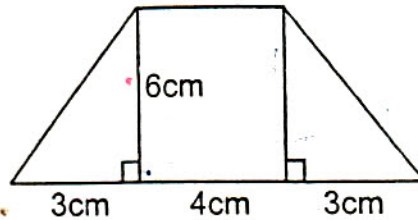
33.



The area of the shaded part as a fraction of the whole square is

- A.  $\frac{3}{4}$ .  
B.  $\frac{5}{4}$ .  
C.  $\frac{1}{4}$ .  
D.  $\frac{1}{2}$ .
34. By how much is the sum of 10 and 20 greater than the difference between them?  
A. 60.  
B. 50.  
C. 40.  
D. 20.
35. In 1989 there was an average of 4 road accidents a day in Plumtree during the months of January, February, March and April. How many accidents occurred during the four months?  
A. 484.  
B. 480.  
C. 472.  
D. 120.
36. Four pupils bought 30 bananas each for their class of 20 pupils. How many bananas does each pupil get if all are shared equally among the pupils in the class?  
A. 10.  
B. 6.  
C. 5.  
D. 4.

37.



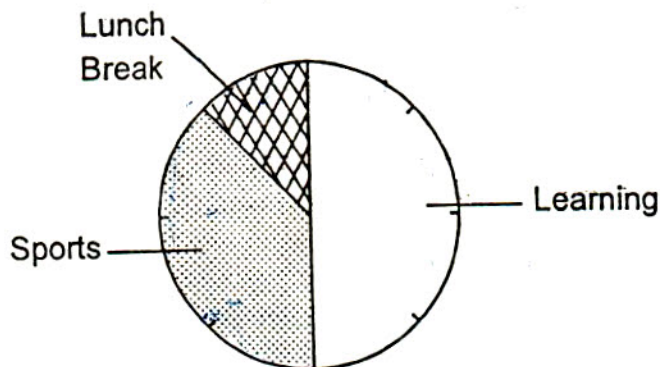
The area of the shape above is

- A.  $60\text{cm}^2$ .  
 B.  $42\text{cm}^2$ .  
 C.  $33\text{cm}^2$ .  
 D.  $16\text{cm}^2$ .
38. Bekithemba is to arrive home at 03 40. She arrives  $2\frac{1}{4}$  hours early. The time will be
- A. 01 25.  
 B. 05 55.  
 C. 01 55.  
 D. 04 25.
39. Mr Ndolwane earns \$7,25 per day working as a general labourer. How much will he earn in a five day working week?
- A. \$36,25.  
 B. \$36,15.  
 C. \$35,15.  
 D. \$33,25.
40. A car travels at 90km/hr. The distance travelled in 90 minutes is
- A. 90km.  
 B. 180km.  
 C. 135km.  
 D. 150km.
41.  $3\frac{1}{4} + 2\frac{1}{2} - 4\frac{1}{3} =$
- A.  $10\frac{1}{12}$ .  
 B.  $1\frac{5}{12}$ .  
 C.  $9\frac{1}{12}$ .  
 D.  $1\frac{1}{12}$ .

[Turn over

42. Betty bought groceries for \$37,50. She gave the storekeeper two \$20,00 notes. How much change did she receive from the storekeeper?
- A. \$2,50.  
B. \$3,50.  
C. \$12,50.  
D. \$17,50.
43. If petrol costs \$40,83 per litre, then the cost of 10 litres is
- A. \$4,08.  
B. \$408,30.  
C. \$4083.  
D. \$40830.
44. A football pitch measures 90m by 45m. If John ran round the edge of the pitch 3 times, the total distance he ran was
- A. 270m.  
B. 370m.  
C. 405m.  
D. 810m.
45. A grain silo has a rectangular floor which measures 30m by 20m. The height of the silo if it holds  $3\,000\text{m}^3$  of grain is
- A. 10m.  
B. 5m.  
C. 20m.  
D. 30m.

46. The pie chart shows how Siphso spent her day at school.



The fraction of the day Siphso spent on sports and learning was

- A.  $\frac{1}{8}$ .  
B.  $\frac{7}{8}$ .  
C.  $\frac{1}{2}$ .  
D.  $\frac{3}{4}$ .

47. Mr Ndou wants to fence his rectangular piece of land measuring 100m by 50m with a 5 strand fence. The length of wire he needs is
- A. 1 500m.
  - B. 750m.
  - C. 600m.
  - D. 300m.

48. Bulawayo

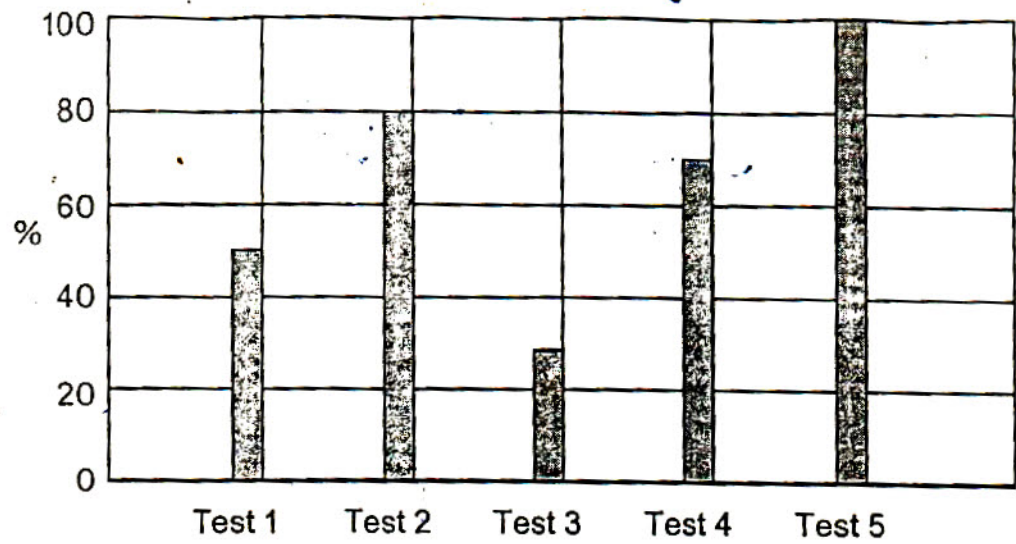
271	Masvingo			
164	183	Gweru		
439	293	275	Harare	
563	297	480	262	Mutare

From the table above, the distance from Bulawayo to Harare is

- A. 563.
  - B. 439.
  - C. 271.
  - D. 164.
49. A water tank has a capacity of  $24\text{m}^3$ . If it is  $\frac{3}{4}$  full of water, then the additional volume of water needed to fill the tank is
- A.  $6\text{m}^3$ .
  - B.  $8\text{m}^3$ .
  - C.  $18\text{m}^3$ .
  - D.  $32\text{m}^3$ .

[Turn over

50. The graph below shows Rudo's test results in five tests.



In which test did Rudo get 70%?

- A. Test 5.
- B. Test 4.
- C. Test 3.
- D. Test 2.

MATHEMATICS

Thursday

24 October 2002

Time 2 hours

**INSTRUCTIONS TO CANDIDATES**

1. Read all the instructions carefully.
2. Do not open this booklet until you are told to do so by the invigilator.
3. Use only an HB pencil for all entries on the answer sheet.
4. When you are told to start, choose one correct answer from the suggested answers and shade it very dark as shown in the examples at the top of the answer sheet.
5. If you wish to change your answer, erase it completely with a pencil rubber and then shade the new choice.
6. If more than one box is shaded for any one answer, that answer will be regarded as wrong.
7. If you do not understand the instructions, ask the invigilator to explain them to you before you start.
8. Answer all the questions on the separate answer sheet provided.
9. Rough paper will be provided.

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This question paper comprises 13 printed pages and 3 blank pages.

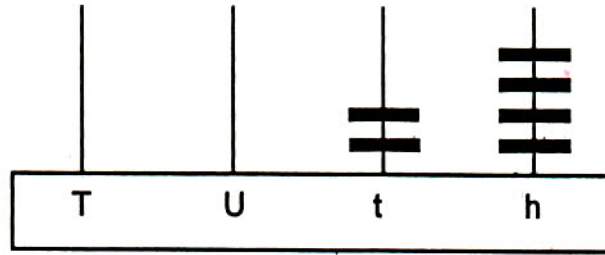
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[Turn over

- A. hundredths.
  - B. tenths.
  - C. tens.
  - D. hundreds.
2. 25 minutes as a fraction of one hour is
- A.  $\frac{1}{4}$ .
  - B.  $\frac{4}{11}$ .
  - C.  $\frac{5}{12}$ .
  - D.  $\frac{2}{3}$ .
3.  $\frac{2}{5}$  as a decimal fraction is
- A. 0,2.
  - B. 0,4.
  - C. 0,45.
  - D. 0,7.
4.  $64,34 + 3$  is equal to
- A. 64,37.
  - B. 64,64.
  - C. 67,34.
  - D. 68,61.
5. 07 20 is the same as
- A. 7.20 p.m.
  - B. 7.20 a.m.
  - C. 20 minutes to 7.
  - D. 20 minutes to 8.
6. 0,008 litres in millilitres is
- A. 0,8.
  - B. 8.
  - C. 80.
  - D. 800.

- A. length.
- B. width.
- C. height.
- D. base.

8.



The number shown on the abacus above is

- A. 240.
  - B. 24.
  - C. 0,24.
  - D. 0,024.
9. 909 rounded off to the nearest ten is
- A. 900.
  - B. 909.
  - C. 910.
  - D. 1 000.
10. Express 1005 cents in dollars.
- A. \$100,05.
  - B. \$10,50.
  - C. \$10,05.
  - D. \$1,05.
11. Which of the following is a prime number?
- A. 27.
  - B. 17.
  - C. 10.
  - D. 9.

[Turn over

- A. 11,6.
- B. 12,0.
- C. 12,1.
- D. 12,2.

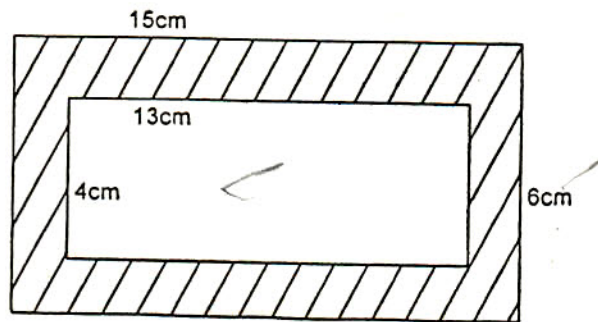
13. What is the value of three \$10 notes, three \$5 notes, one \$2 coin and five 20 cent coins?

- A. \$47,20.
- B. \$48,00.
- C. \$49,00.
- D. \$51,20.

14. A motorist covered a distance of 30 km travelling at an average speed of 72 km/hr. The time taken was

- A. 15 minutes.
- B. 25 minutes.
- C. 2 hours 12 minutes.
- D. 2 hours 24 minutes.

15.



The area of the shaded part in the diagram above is

- A. 38 cm<sup>2</sup>.
- B. 42 cm<sup>2</sup>.
- C. 52 cm<sup>2</sup>.
- D. 90 cm<sup>2</sup>.

109

- A. \$50.
- B. \$60.
- C. \$75.
- D. \$90.

17. If 25kg is increased by 10%, it becomes

109

- A. 15,0 kg.
- B. 27,5 kg.
- C. 35,0 kg.
- D. 40,0 kg.

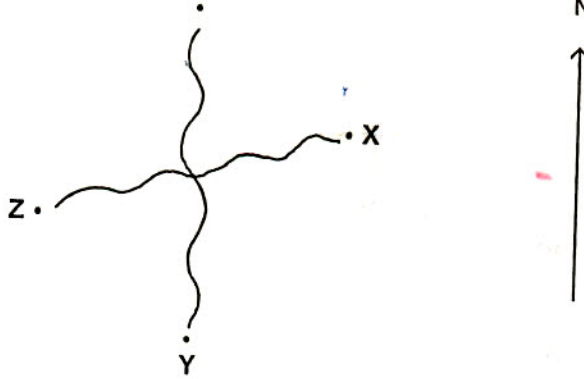
18. A box which measures 9 cm long, 4 cm wide and 2 cm deep has a volume of

- A. 15 cm<sup>3</sup>.
- B. 22 cm<sup>3</sup>.
- C. 38 cm<sup>3</sup>.
- D. 72 cm<sup>3</sup>.

19. The perimeter of a regular hexagon of side 8 cm is

- A. 32 cm.
- B. 40 cm.
- C. 48 cm.
- D. 64 cm.

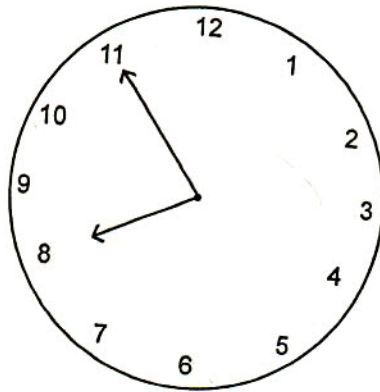




In the diagram above, the direction of Y from X is

- A. North West.
- B. South East.
- C. South West.
- D. North East.

21.



The clock above is 25 minutes behind. What is the correct time?

- A. 7.30.
- B. 7.55.
- C. 8.20.
- D. 8.25.

22. When a tank is 25% full, it contains 40 litres of water. The capacity of the tank is

- A. 10 litres.
- B. 65 litres.
- C. 150 litres.
- D. 160 litres.

- A. 800.
- B. 2300.
- C. 3000.
- D. 3600.

24. Multiplying 4 by itself three times gives

- A. 12.
- B. 48.
- C. 64.
- D. 68.

25. If  $6,8 \times 0,2$  is 1,36, then  $6,8 \times 0,02$  is

- A. 0,0136.
- B. 0,136.
- C. 1,36.
- D. 1,40.

26. James bought a television set at an auction for \$3 000. He later sold it making a profit of 20%. How much did he sell the television set for?

- A. \$600.
- B. \$2 400.
- C. \$3 020.
- D. \$3 600.

27.  $7\frac{1}{3} - 3\frac{3}{4} =$

- A.  $\frac{7}{12}$ .
- B.  $3\frac{5}{12}$ .
- C.  $3\frac{7}{12}$ .
- D.  $4\frac{7}{12}$ .

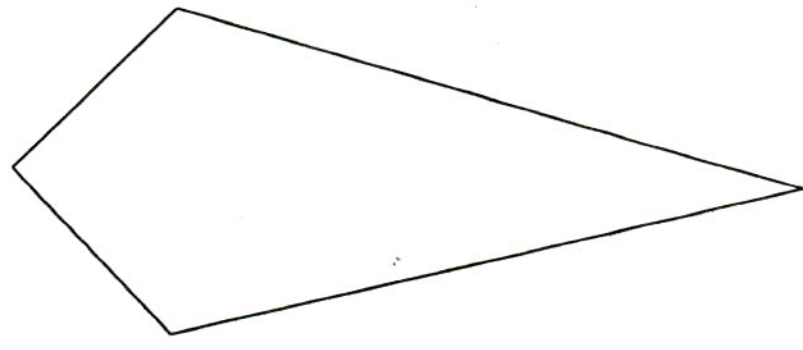
28. A piece of string  $3\frac{1}{2}$  metres long was cut into 5 equal pieces. How long was each piece?

- A. 700 cm.
- B. 70 cm.
- C. 7 cm.
- D. 0,7 cm.

[Turn over

- A. 1800 ha.
- B. 180 ha.
- C. 18 ha.
- D. 1,8 ha.

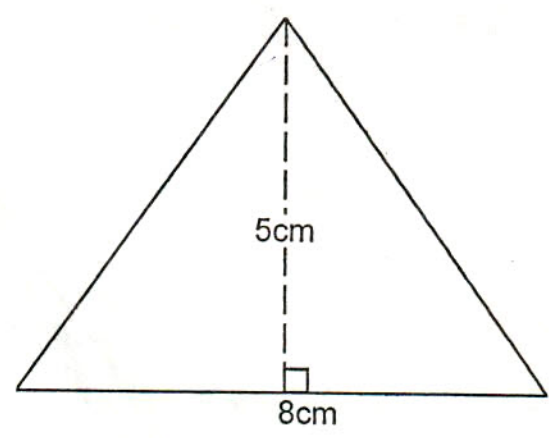
30.



The shape above is a

- A. kite.
- B. parallelogram.
- C. pentagon.
- D. triangle.

31.



Find the area of the triangle above.

- A.  $80\text{cm}^2$ .
- B.  $40\text{cm}^2$ .
- C.  $20\text{cm}^2$ .
- D.  $13\text{cm}^2$ .

- A. 0 hours 48 minutes.
- B. 11 hours 12 minutes.
- C. 12 hours 48 minutes.
- D. 18 hours 42 minutes.

33. A fully loaded lorry has a mass of 5,5t. The empty lorry weighs 2000kg. Find the net mass.

- A. 2005,5t.
- B. 11,0t.
- C. 7,5t.
- D. 3,5t.

34.

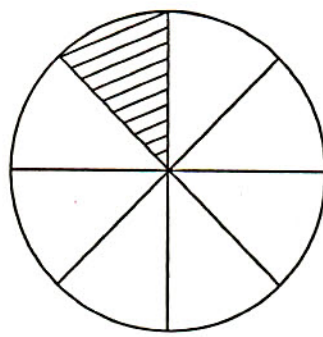
Day of the week	Monday	Tuesday	Wednesday	Thursday	Friday
Number of people	28	34	31	29	33

The table above shows the daily migration of Beitbridge people to South Africa during the week. What was the average daily migration of people?

- A. 34.
- B. 32.
- C. 31.
- D. 29.

35. One way of writing 2,136 is

- A.  $2\ 000 + 100 + 30 + 6$ .
- B.  $2\ 100 + 30 + 6$ .
- C.  $2 + \frac{1}{10} + \frac{3}{100} + \frac{6}{1000}$ .
- D.  $2 + \frac{1}{100} + \frac{3}{1000} + 6$ .



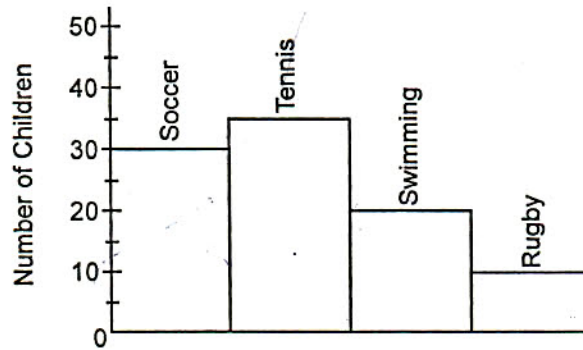
What fraction of the shape above is shaded?

- A. 0,124.  
B. 0,125.  
C. 0,130.  
D. 0,800.
37. Mr Tigere deposited \$600 in a bank which offers 20% interest per annum. How much interest did he earn in one year?
- A. \$120.  
B. \$480.  
C. \$620.  
D. \$720.
38. A square garden has a perimeter of 160 m. Its area is
- A. 80 m<sup>2</sup>.  
B. 180 m<sup>2</sup>.  
C. 320 m<sup>2</sup>.  
D. 1600 m<sup>2</sup>.
39. A school has 750 children. If 36% are infants, then the number of juniors is
- A. 250.  
B. 270.  
C. 480.  
D. 500.

109

- A. 5 days.
- B.  $5\frac{1}{2}$  days.
- C. 6 days.
- D.  $10\frac{2}{3}$  days.

41.



The graph above shows the number of children who play different games. How many children play the four games altogether?

- A. 35.
  - B. 40.
  - C. 95.
  - D. 150.
42. The average age of 4 children is 17 years. The ages of the first three are 21, 18 and 15. What is the age of the fourth child?
- A. 13 years.
  - B. 14 years.
  - C. 19 years.
  - D. 54 years.
43. The cost of 8 sweets is \$4,80. If John buys 10 such sweets, the change he gets from \$10,00 is
- A. \$0,60.
  - B. \$0,80.
  - C. \$4,00.
  - D. \$4,60.

[Turn over

- A. 0,400 kilograms.
- B. 1,600 kilograms.
- C. 2,500 kilograms.
- D. 3,500 kilograms.

45. If the product of 24 and 16 is divided by their difference, the result is

- A. 8.
- B. 40.
- C. 48.
- D. 384.

46. Jane bought 20 packets of brown sugar at \$9 each. 5 of them were destroyed by rats. She sold the remainder at \$13 each. The profit she made was

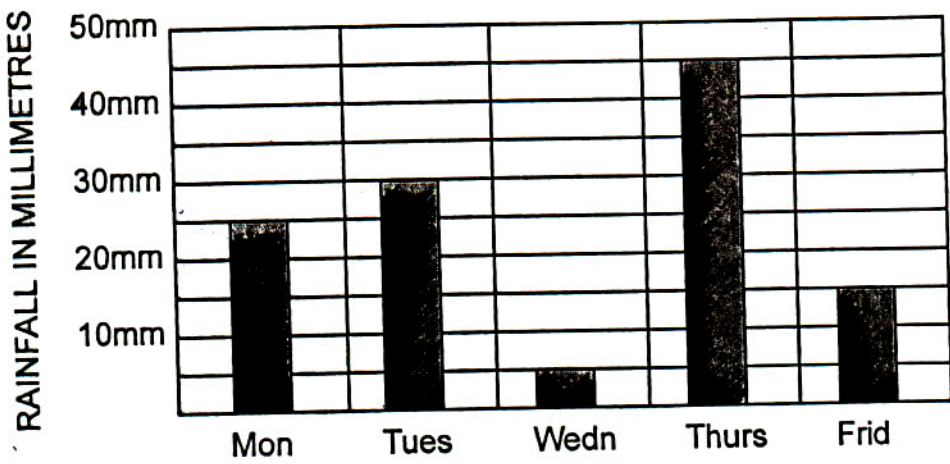
- A. \$10.
- B. \$15.
- C. \$35.
- D. \$80.

47. What is the highest common factor (H.C.F.) of 12 and 9?

- 1001
- A. 36.
  - B. 24.
  - C. 18.
  - D. 3.

48. A retailer bought goods from a wholesaler for \$187,50 and sold them for \$200. How much was his profit?

- A. \$12,50.
- B. \$13,50.
- C. \$22,50.
- D. \$23,50.



The graph above shows the rainfall for five days of the week. Use it to answer questions 49 and 50.

49. The difference between the highest and lowest rainfall is

- A. 40 mm.
- B. 30 mm.
- C. 25 mm.
- D. 5 mm.

50. What was the total rainfall for the five days?

- A. 110 mm.
- B. 115 mm.
- C. 120 mm.
- D. 150 mm.

251230

GRADE SEVEN EXAMINATION, 2003.

MATHEMATICS

PAPER 1

Thursday

30 October 2003

Time: 2 hours

**INSTRUCTIONS TO CANDIDATES**

1. Read **all** the instructions carefully.
2. **Do not** open this booklet until you are told to do so by the invigilator.
3. Use only an HB pencil for all entries on the answer sheet.
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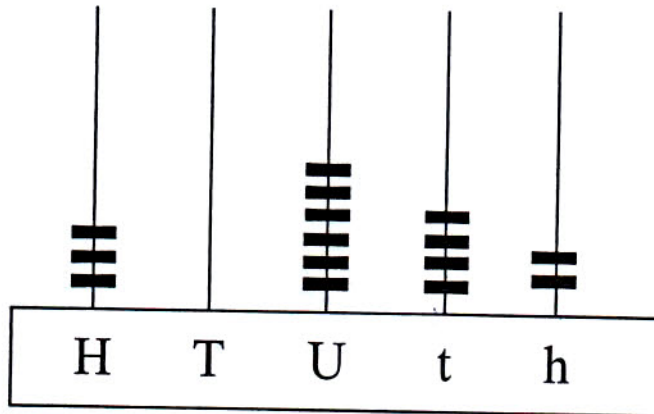
**This question paper comprises 12 printed pages.**

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**[Turn over**

- A. 250 350.
- B. 205 350.
- C. 205 035.
- D. 25 350.

2.



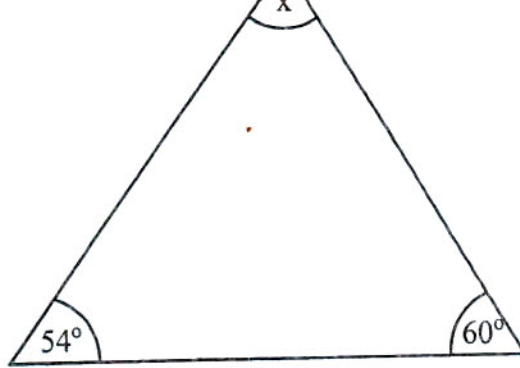
*20/01/2011*  
The abacus above shows

- A. 30,642.
  - B. 3 642.
  - C. 306,42.
  - D. 30 642.
3. Which of these numbers is a prime number?
- A. 2
  - B. 6
  - C. 9
  - D. 15
4. 3 cents in dollars is
- A. \$300.
  - B. \$3,00.
  - C. \$0,30.
  - D. \$0,03.

- A. tonne  
B. gram  
C. millimetre  
D. millilitre
6. 15 minutes after noon is the same as
- A. 00 15.  
B. 12 15.  
C. 15 00.  
D. 23 45.
7. Five sweets cost \$2,50, six sweets and a chewing gum cost \$4,50. What is the cost of the chewing gum?
- A. \$3,00  
B. \$2,00  
C. \$1,50  
D. \$0,50
8. What is the smaller amount when \$20 is shared in the ratio 1:4?
- A. \$16.  
B. \$5.  
C. \$4.  
D. \$1.
9.  $0,24 + 0,8$  is
- A. 4,00.  
B. 0,40.  
C. 0,30.  
D. 0,03.
10. Lucy's span is 0,16m. She measured the length of the kitchen unit and got 8 spans. Calculate the length of the kitchen unit.
- A. 0,02m  
B. 1,28m  
C. 7,84m  
D. 8,16m

[Turn over

11. The difference between 2008 and 1999 is
- A. 1009.
  - B. 1008.
  - C. 90.
  - D. 9.
12. If 72 is increased by 24 it becomes
- A. 1728.
  - B. 96.
  - C. 48.
  - D. 3.
13.  $0,375 \times 100 =$
- A. 3 750.
  - B. 375.
  - C. 37,5.
  - D. 3,75.
14.  $2\frac{1}{4} - 1\frac{2}{3}$  is
- A.  $3\frac{1}{2}$ .
  - B.  $1\frac{1}{4}$ .
  - C.  $\frac{11}{12}$ .
  - D.  $\frac{7}{12}$ .
15. What is the lowest common multiple (LCM) of 8 and 12?
- A. 96
  - B. 48
  - C. 24
  - D. 4
16. What is the perimeter of a square with side 5,5cm?
- A. 11,0cm
  - B. 22,0cm
  - C. 25,0cm
  - D. 28,75cm



In the triangle above, the value of  $x$  is

- A.  $76^\circ$ .
  - B.  $66^\circ$ .
  - C.  $56^\circ$ .
  - D.  $46^\circ$ .
18. A tin full of jam weighs 935g. The empty tin weighs 40g. What is the mass of the jam?
- A. 975g
  - B. 895g
  - C. 885g
  - D. 875g
19.  $2\frac{1}{4}$  litres is the same as
- A. 225ml.
  - B. 2025ml.
  - C. 2 250ml.
  - D. 20 250ml.
20. Express 12.05 p.m. in the 24 hour notation.
- A. 12 05
  - B. 05 12
  - C. 02 05
  - D. 00.05
21. Rounding off 23,539 to the nearest hundredth gives
- A. 23,50.
  - B. 23,53.
  - C. 23,54.
  - D. 24,00.

[Turn over

- A. 0,08.
- B. 0,15.
- C. 3,05.
- D. 3,50.

23. The value of  $3^3 + 1$  is

- A. 9.
- B. 11.
- C. 27.
- D. 28.

24. If paraffin costs \$10,50 a litre, then the cost of 3,5 litres is

- A. \$367,50.
- B. \$36,75.
- C. \$30,25.
- D. \$13,10.

25. A rectangle has an area of  $91 \text{ cm}^2$ . If it has a length of 13 cm then its width is

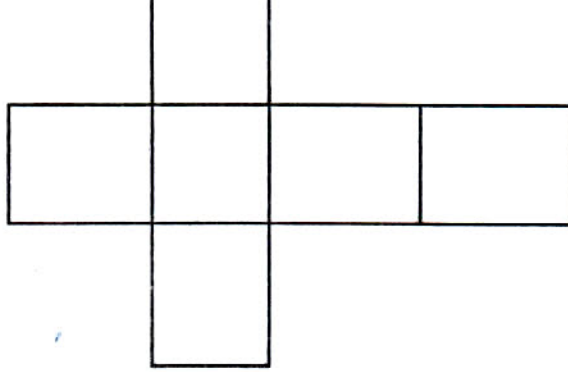
- A. 6,5cm.
- B. 7cm.
- C. 8 cm.
- D. 8,5 cm.

26.  $2\frac{3}{8}$  as an improper fraction is

- A.  $\frac{13}{8}$ .
- B.  $\frac{16}{8}$ .
- C.  $\frac{19}{3}$ .
- D.  $\frac{19}{8}$ .

27. What is 0,65 as a common fraction?

- A.  $\frac{13}{20}$ .
- B.  $\frac{3}{20}$ .
- C.  $\frac{4}{5}$ .
- D.  $\frac{3}{5}$ .



What shape has the net above?

- A. pyramid
- B. cone
- C. cube
- D. cylinder

29. Simplify  $\frac{5}{8} \times 1\frac{3}{5} + \frac{1}{8}$ .

- A.  $\frac{1}{8}$
- B.  $\frac{13}{64}$
- C. 8
- D. 13

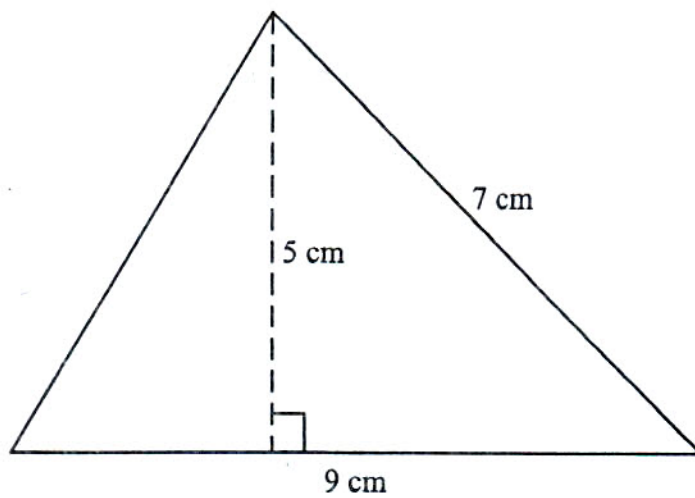
30. 30% of \$4,20 is

- A. \$1,26.
- B. \$1,40.
- C. \$2,94.
- D. \$5,46.

31. An electric train travelling from Dabuka to Harare covers 60km in half an hour. What is its average speed in km/hr?

- A. 30
- B. 90
- C. 120
- D. 180

[Turn over



What is the area of the triangle above?

- A.  $45,0\text{cm}^2$
- B.  $35,0\text{cm}^2$
- C.  $22,5\text{cm}^2$
- D.  $17,5\text{cm}^2$

33. In a Grade 4 class there are 55 pupils. If  $\frac{4}{11}$  of them are girls, how many of them are boys?

- A. 35
- B. 30
- C. 25
- D. 20

34.  $\frac{4}{9}$  is the same as

- A.  $\frac{8}{27}$ .
- B.  $\frac{8}{18}$ .
- C.  $\frac{16}{54}$ .
- D.  $\frac{16}{27}$ .

35. 0,4 expressed as a percentage is

- A. 80%.
- B. 60%.
- C. 40%.
- D. 4%.

- A. 16
- B. 18
- C. 19
- D. 20

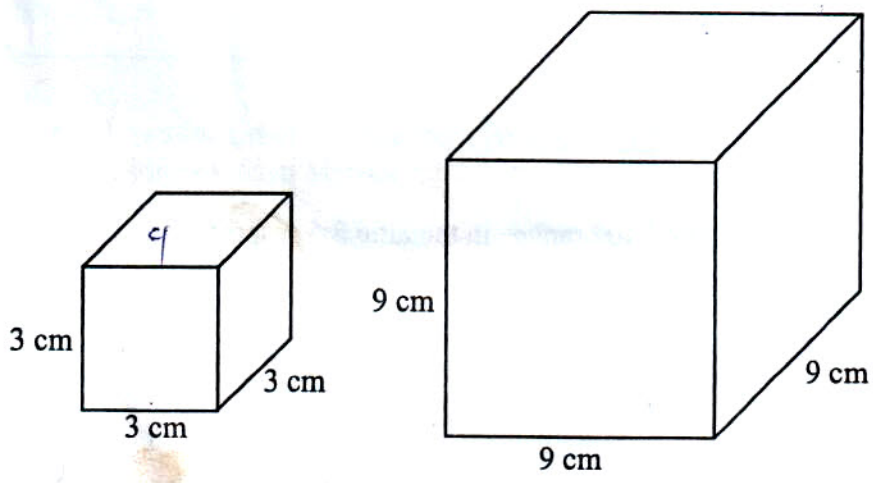
37. Noel is facing North. He turns in a clockwise direction through three right angles. Now he is facing

- A. North.
- B. East.
- C. West.
- D. South.

38. Mary spent  $\frac{1}{3}$  of her money on sweets,  $\frac{1}{4}$  on fruits and the remaining 25c on a pen. How much did she have at first?

- A. 15c
- B. 20c
- C. 35c
- D. 60c

39.



How many of the small cubes can fit into the big cube?

- A. 3
- B. 9
- C. 27
- D. 81

[Turn over

was

- A. 15 00.
  - B. 14 35.
  - C. 14 30.
  - D. 13 35.
41. Four boys shared \$16,28 equally. Each boy got
- A. \$4,70.
  - B. \$4,07.
  - C. \$0,74.
  - D. \$0,47.
42. Travelling at an average speed of 80km/hr, a car took 3 hours 30 minutes to complete a journey. How long was the journey?
- A. 300km
  - B. 280km
  - C. 260km
  - D. 240km
43. A toy was marked \$93,50. A customer was given a discount of 10%. How much did he pay for the toy?
- A. \$103,50
  - B. \$102,85
  - C. \$84,15
  - D. \$9,35
44. Bernard and Gibson shared 40 oranges in the ratio 3:5 respectively. Bernard had
- A. 35 oranges.
  - B. 25 oranges.
  - C. 15 oranges.
  - D. 10 oranges.
45. There are 80 singers in a church choir. Of these, 25% are men. How many women are in the choir?
- A. 75
  - B. 60
  - C. 40
  - D. 20

- A. 1,48m.
- B. 1,45m.
- C. 1,37m.
- D. 1,23m.

47.

STATION	TIME	
HARARE	_____	_____
	Dep	10 00
MARONDERA	Arr	11 45
	Dep	12 00
RUSAPE	Arr	14 45
	Dep	15 15
MUTARE	Arr	17 15
	_____	_____

The table above shows the times of a bus from Harare to Mutare. How long does the journey from Marondera to Rusape take?

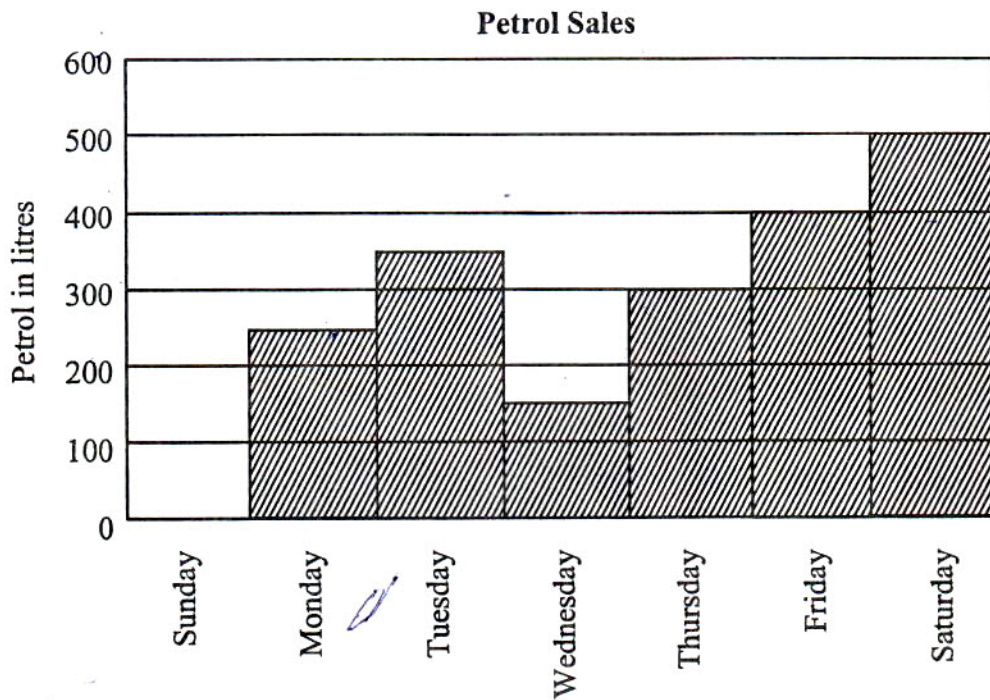
- A. 5 hours 15 minutes
- B. 4 hours 45 minutes
- C. 3 hours 15 minutes
- D. 2 hours 45 minutes

[Turn over

James	Janet	Moses	Miriam
131 sec	118 sec	121 sec	125 sec

The table above shows results of a reading competition. Who was the fastest reader?

- A. Moses
- B. Miriam
- C. Janet
- D. James



The graph above shows petrol sales in a week. Use it to answer questions 49 and 50.

49. How many litres of petrol were sold on the busiest day?
- A. 100 litres
  - B. 300 litres
  - C. 400 litres
  - D. 500 litres
50. On which day is the garage closed?
- A. Sunday
  - B. Wednesday
  - C. Saturday
  - D. Tuesday

**GRADE SEVEN EXAMINATION, 2003.**

**MATHEMATICS**

**PAPER 2**

**Wednesday**

**5 November 2003**

**Time: 2 hours**

**INSTRUCTIONS TO CANDIDATES**

1. Answer **all** questions in Section A.
2. Answer any **three** questions from Section B.
3. Section A carries 25 marks.
4. Section B carries 15 marks.
5. To obtain full marks for any question, **all working** must be shown.
6. Do **not** measure from given diagrams.
7. Electronic calculators and slide rules **must not** be used in the examination.
8. **Underline** answers and rule off after each answer.

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**This question paper consists of 4 printed pages.**

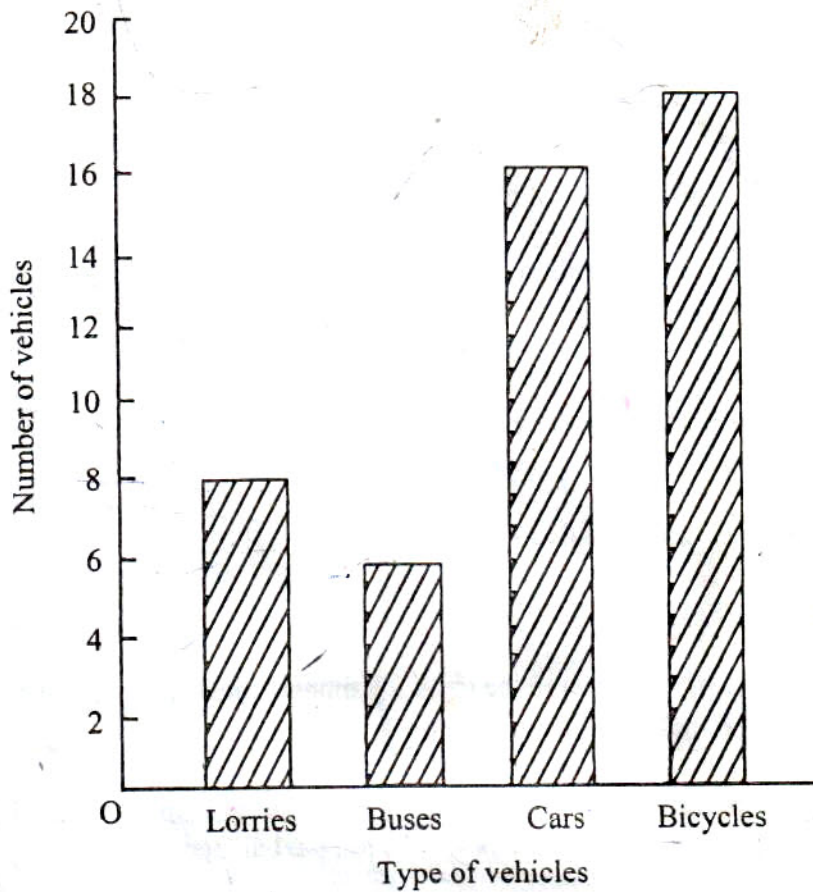
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**[Turn over**

*Answer all questions in this section.*

1. Find the difference between 112 and 89. [2]
2. A tank has a length of 8 metres, a width of 6 metres and a depth of 3 metres. Calculate the volume of water in the tank when it is half full. [3]
3. Find the value of
  - (i)  $0,001 + 0,999$ . [2]
  - (ii)  $0,2 - 0,18$ . [2]
4. Mary invested \$7 200 at 6% interest per annum for 5 years.
  - (a) Calculate the interest she earned. [2]
  - (b) Find the total amount she received. [2]
5. Peter had \$160. He spent  $\frac{1}{2}$  of it on buns and  $\frac{1}{4}$  of the remainder on sweets.
  - (a) How much did he spend on sweets? [2]
  - (b) How much change did he receive? [2]

in an hour. The graph below shows their results.



- (a) Calculate the difference between the most and the least common type of vehicles which passed through the shopping centre. [2]
- (b) Find the total number of lorries and cars which passed through the shopping centre. [2]
7. A train covers 78 km in 1 hour 5 minutes.
- (a) Calculate the average speed of the train in kilometres per hour. [2]
- (b) If the train travels at the same speed, how far will it travel in 45 minutes? [2]

[Turn over

8. John read 25% of his book on Wednesday, 35% on Thursday and the remaining 120 pages on Friday.

(a) How many pages did John read altogether on Wednesday and Thursday? [2]

(b) Calculate the number of pages in the book. [3]

9. Mrs Moyo bought a box of soap powder measuring 16 cm by 10 cm by 4 cm.

(a) Calculate the volume of the box. [2]

(b) How many such boxes can fit in a carton measuring 32 cm by 20 cm by 16 cm? [3]

10. An athletics track measures 400,2 m.

(a) Express 400,2 m in millimetres. [2]

(b) If an athlete runs around the track  $2\frac{1}{2}$  times, calculate the distance covered to the nearest whole number? [3]

11. Farai bought a radio marked \$8 600 under hire purchase terms. She paid a deposit of 20% and was charged 5% interest on the balance.

(a) Calculate the deposit she paid. [2]

(b) Find the interest charged. [3]

12. A wall measures 12 metres by 10 metres. A litre of paint is needed to paint  $6\text{ m}^2$ .

(a) Calculate the number of litres that are needed to paint the wall. [3]

(b) If a litre of paint costs \$450, how much is needed to paint the wall? [2]

GRADE SEVEN EXAMINATION, 2004.

244355

MATHEMATICS

PAPER 1

Thursday 21 OCTOBER 2004

Time: 2 hours

**INSTRUCTIONS TO CANDIDATES**

1. Read **all** the instructions carefully.
2. Do **not** open this booklet until you are told to do so by the invigilator.
3. Use **only** an HB pencil for all entries on the answer sheet.
4. When you are told to start, choose **one** correct answer from the suggested answers and shade it **very dark** as shown in the examples at the top of the answer sheet.
5. If you wish to change your answer, **erase** it **completely** with a pencil rubber and then shade the new choice.
6. If **more** than **one** box is shaded for any one answer, that answer will be regarded as **wrong**.
7. **If you do not understand** the instructions **ask** the invigilator to explain them to you **before** you start.
8. Answer **all** the questions on the separate answer sheet provided.
9. Rough paper will be provided.

---

**This question paper comprises 11 printed pages and 1 blank pages.**

Copyright: Zimbabwe School Examinations Council, N2004.

- A. 19 090.  
B. 90 019.  
C. 90 090.  
D. 90 900.
2.  $8 - 10 + 7$  is
- A. 5.  
B. 9.  
C. 11.  
D. 25.
3.  $\frac{3}{8}$  expressed as a decimal fraction is
- A. 0,125.  
B. 0,375.  
C. 0,380.  
D. 0,625.
4. A minute past 12 midnight in 24 hour notation is
- A. 00 01.  
B. 00 10.  
C. 12 01.  
D. 24 01.
5. What fraction of 35 is 28?
- A.  $\frac{1}{5}$   
B.  $\frac{1}{4}$   
C.  $\frac{3}{4}$   
D.  $\frac{4}{5}$
6. A regular shape with seven sides is called a
- A. heptagon.  
B. decagon.  
C. hexagon.  
D. nonagon.
7. The total value of nine 5c coins, two \$10 notes and three \$50 notes is
- A. \$150,65.  
B. \$170,45.  
C. \$215,00.  
D. \$219,50.

- A.  $12\frac{1}{2}$ .
- B.  $1\frac{1}{2}$ .
- C.  $1\frac{1}{4}$ .
- D.  $1\frac{1}{8}$ .

9. The Lowest Common Multiple of 12; 16 and 20 is

- A. 320.
- B. 480.
- C. 240.
- D. 120.

10. 9,587 correct to 2 decimal places is

- A. 9,58.
- B. 9,59.
- C. 9,60.
- D. 10,00.

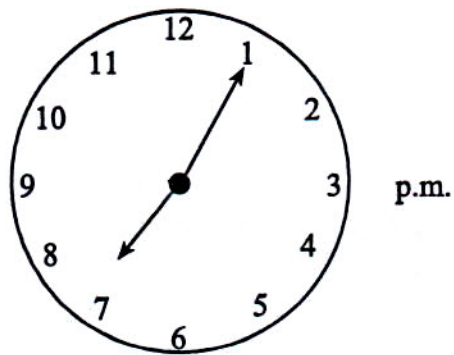
11. The length in cm of a rectangle whose area is  $70\text{ cm}^2$  and width 5 cm is

- A. 350.
- B. 75.
- C. 65.
- D. 14.

12. Mr Dube had 80 animals on his farm. 20% of them were goats, 50% sheep and the rest were donkeys. How many donkeys had he?

- A. 16
- B. 24
- C. 40
- D. 56

[Turn over



- The diagram above shows a clock. What time will it be after 1 hour 45 minutes?
- A. 17 20
  - B. 19 45
  - C. 20 45
  - D. 20 50
14. The marked price of a book was \$700. Dominic bought it at a discount of 8%. The amount he paid was
- A. \$756,00.
  - B. \$654,00.
  - C. \$644,00.
  - D. \$56,00.
15. What is the number of decades in a century?
- A. 100
  - B. 12
  - C. 10
  - D. 1
16. Julia can walk 100 m in a minute. Her speed in kilometres per hour is
- A. 6 000.
  - B. 600.
  - C. 60.
  - D. 6.
17. The value of 4 in 1,34 kg is
- A. 4 g.
  - B. 40 g.
  - C. 4 kg.
  - D. 40 kg.

- A. 7000.
- B. 700.
- C. 70.
- D. 7.

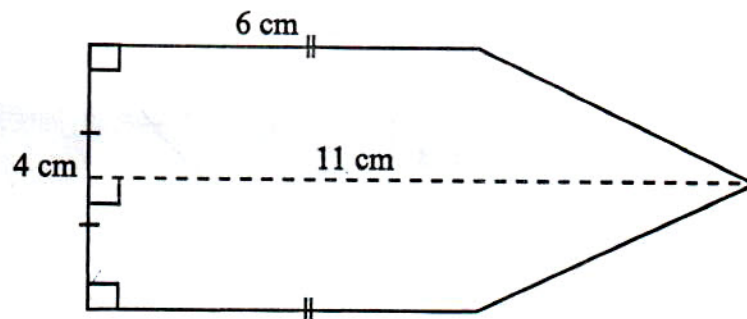
19.  $n + 33 = 19$ . The value of  $n$  in this statement is

- A. 627.
- B. 527.
- C. 330.
- D. 297.

20. The gross mass of a truck is 7,04 tonnes. Its mass is 4,4 tonnes. The mass of the load is

- A. 11,44 tonnes.
- B. 3,64 tonnes.
- C. 6,6 tonnes.
- D. 2,64 tonnes.

21.



What is the area of the shape above?

- A.  $34 \text{ cm}^2$
- B.  $44 \text{ cm}^2$
- C.  $66 \text{ cm}^2$
- D.  $264 \text{ cm}^2$

22. What is the interest on \$600 invested for  $2\frac{1}{2}$  years at 6% per annum?

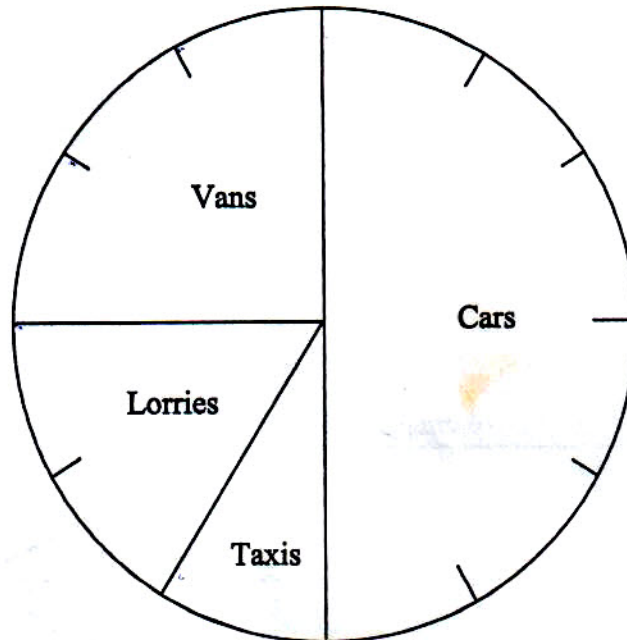
- A. \$60
- B. \$90
- C. \$650
- D. \$690

[Turn over

5 cm × 4 cm × 2 cm. The number of small boxes contained is

- A. 32.
- B. 40.
- C. 64.
- D. 320.

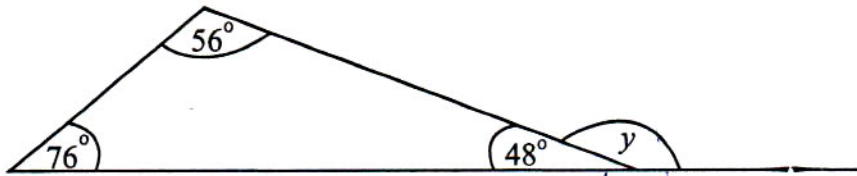
24. The pie chart below shows the vehicles that passed through a business centre in an hour.



- If 384 vehicles passed through the business centre, the number of vans which passed through was
- A. 32.
  - B. 64.
  - C. 96.
  - D. 192.
25. A bottle of cough mixture holds 750 ml. If Peter takes 5 ml of the mixture 3 times a day, how long does it last him?
- A. 50 days
  - B. 60 days
  - C. 150 days
  - D. 250 days
26. If making a phone call costs \$64 for 4 minutes, how much would be paid for a 48 minute call?
- A. \$768
  - B. \$628
  - C. \$256
  - D. \$192

- A.  $15 \text{ cm}^3$ .
- B.  $25 \text{ cm}^3$ .
- C.  $125 \text{ cm}^3$ .
- D.  $150 \text{ cm}^3$ .

28.



What is the value of the angle marked  $y$  in the diagram above?

- A.  $312^\circ$
  - B.  $222^\circ$
  - C.  $180^\circ$
  - D.  $132^\circ$
29. Which among these is **not** a square number?
- A. 1
  - B. 2
  - C. 4
  - D. 9
30. 0,3 of a pole 18,2 m long was buried below the ground. How tall was the pole above the ground?
- A. 5,46 m
  - B. 12,74 m
  - C. 17,9 m
  - D. 18,5 m
31. 2; 3 and 5 are prime factors of
- A. 10.
  - B. 12.
  - C. 15.
  - D. 30.
32. The scale on a map is 1 : 50 000. The actual distance between places which are 1,5 cm apart in kilometres is
- A. 0,75.
  - B. 7,5.
  - C. 75.
  - D. 750.

[Turn over

33.  $\frac{1}{3} + \frac{1}{5} =$
- A.  $\frac{2}{5}$ .
  - B.  $\frac{9}{10}$ .
  - C.  $1\frac{1}{9}$ .
  - D.  $2\frac{1}{2}$ .
34. 7 cups were filled from a jug holding  $3\frac{1}{2}$  litres of water. What fraction of a litre was poured into each cup?
- A.  $\frac{1}{4}$
  - B.  $\frac{2}{5}$
  - C.  $\frac{3}{7}$
  - D.  $\frac{1}{2}$
35. In which number does 5 have the value of 50 000?
- A. 125 963
  - B. 152 693
  - C. 213 596
  - D. 512 936
36. Janet was facing West. She turned anticlockwise through 3 right angles. She is now facing
- A. East.
  - B. South.
  - C. West.
  - D. North.
37. Travelling at an average speed of 90 km/h, a bus took 4 hours 30 minutes to complete a journey. The distance it covered was
- A. 45 km.
  - B. 360 km.
  - C. 405 km.
  - D. 810 km.
38. The difference between two numbers is 14. If their sum is 30, then the numbers are
- A. 23 and 7.
  - B. 22 and 8.
  - C. 20 and 10.
  - D. 18 and 20.

$$\begin{array}{r} 90 \\ 45 \\ \hline 135 \end{array}$$
$$\begin{array}{r} 20 \\ 10 \\ \hline 30 \end{array}$$

39. Mr Nyoni's account had \$500. He deposited \$350 and later withdrew \$475. His new balance is

- A. \$375.
- B. \$625.
- C. \$825.
- D. \$850.

40. The product of 1,3 and 0,02 is

- A. 0,026.
- B. 0,26.
- C. 2.6.
- D. 26,0.

41. In 1999 Thabo was twice as old as Nomusa. In 2001 Nomusa was 5 years old, how old was Thabo in 2001?

- A. 4
- B. 6
- C. 8
- D. 10

42. How many lines of symmetry does a regular hexagon have?

- A. 2
- B. 3
- C. 4
- D. 6

43. The formula  $2(L + W)$  is used to find a rectangle's

- A. mass.
- B. area.
- C. perimeter.
- D. volume.

44.  $9,6 + 0,8 =$

- A. 0,02.
- B. 1,2.
- C. 12.
- D. 120.

45. Two hours have been allocated to a 50 question test paper. The average time for each question is

- A. 25 sec.
- B. 1 min 4 sec.
- C. 2 min 40 sec.
- D. 2 min 24 sec.

**[Turn over**

46. In a class there are 25 boys and 15 girls. The ratio of girls to boys is

- A. 3 : 8.
- B. 3 : 5.
- C. 5 : 3.
- D. 8 : 5.

47.  $20 + 3 \times 4$  is

- A. 32.
- B. 64.
- C. 83.
- D. 92.

Use the distance table below to answer questions 48 and 49.

Beitbridge

322	Bulawayo				
607	299	Kadoma			
427	154	135	Gweru		
582	440	141	270	Harare	
586	568	403	480	262	Mutare

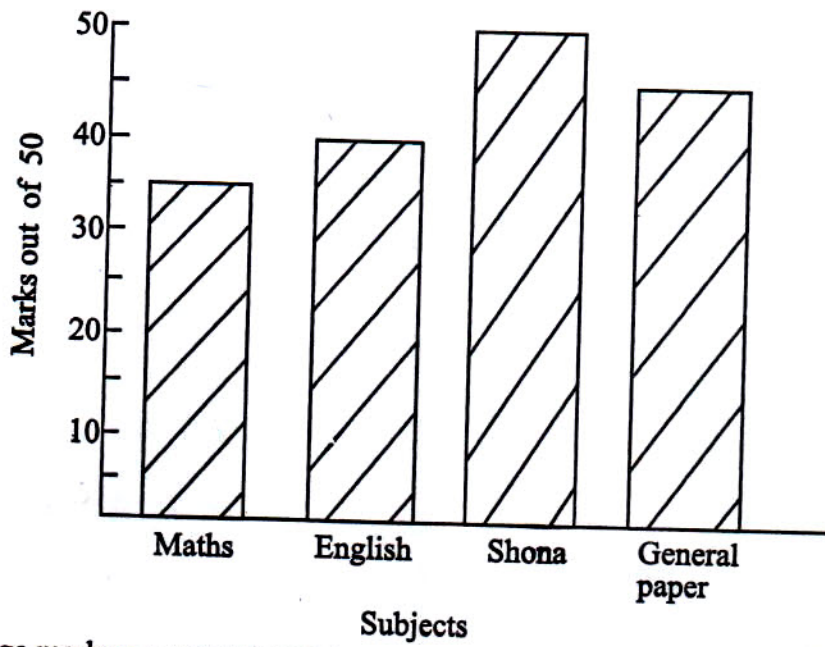
48. What is the distance between Harare and Beitbridge?

- A. 568 km
- B. 582 km
- C. 586 km
- D. 607 km

49. The difference between the distances, Bulawayo to Gweru and Kadoma to Mutare in kilometres is

- A. 403.
- B. 359.
- C. 249.
- D. 154.

30. The graph below shows marks obtained by Lucy in her end of year examinations.



The average mark as a percentage was

- A. 85.
- B. 80,5.
- C. 84.
- D. 42,5.

Wednesday 27 OCTOBER 2004

Time: 2 hours

**INSTRUCTIONS TO CANDIDATES**

1. Answer **all** questions in Section A.
  2. Answer **three** questions in Section B.
  3. Section A carries 25 marks.
  4. Section B carries 15 marks.
  5. To obtain full marks for any question, **all working** must be shown.
  6. Do **not** measure from given diagrams.
  7. Electronic calculators and slide rules **must not** be used in the examination.
- Underline** answers and rule off after each answer.

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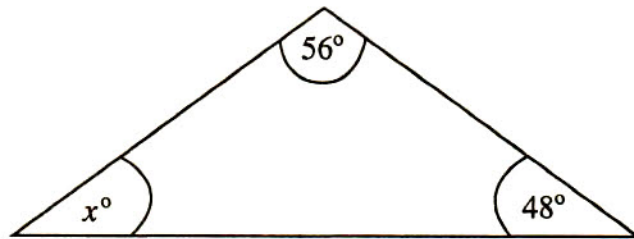
**This question paper consists of 5 printed pages and 3 blank pages.**

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Answer *all* questions in this section.

1. Find the value of 27 divided by 0,9. [2]

2. The diagram below shows a triangle.



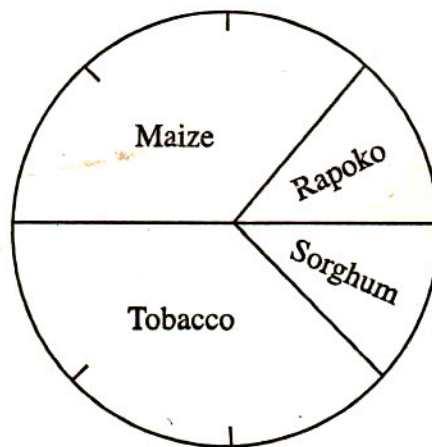
Find the value of  $x$ . [3]

3. In a class of 40 pupils,  $\frac{3}{5}$  of them are in the school choir.  $\frac{1}{6}$  of the choir are boys.

(a) Find the number of pupils in the school choir. [2]

(b) Calculate the number of girls in the school choir. [2]

4.



The pie chart above shows the four main crops produced by a region in Zimbabwe.

(a) What fraction of the crop production is maize and rapoko? [2]

(b) Express the tobacco production as a percentage. [2]

5. The perimeter of a rectangle is 20 cm. If its length is 6 cm, find its
- (a) width, [2]
  - (b) area. [2]
6. Six men can complete a piece of job in 30 days.
- (a) Working at the same rate how long would it take 20 men to complete the work? [2]
  - (b) Express 30 days in hours. [2]
7. The total surface area of a cube is  $96 \text{ cm}^2$ . Calculate the length of each edge. [4]

Answer three questions in this section.

8. A man painted a rectangular wall measuring 6 m by 4 m. He painted  $\frac{5}{6}$  of it white and the rest black.

- (a) What area was painted black? [3]
- (b) If it cost \$15 to paint  $1 \text{ m}^2$ , how much did it cost to paint the wall? [2]

9. The table below shows the timetable for a bus which travels between Gweru and Mvuma.

GWERU	DEPARTS	8.00 AM
LALAPANZI	ARRIVES DEPARTS	8.50 AM 8.55 AM
MVUMA	ARRIVES DEPARTS	9.40 AM 9.50 AM
CHIRIMANZU	ARRIVES DEPARTS	10.25 AM 10.40 AM
GUTU	ARRIVES	11.20 AM

- (a) Where will the bus be after 2 hours 25 minutes of its departure from Gweru? [2]
- (b) Calculate the total stoppage time from Gweru. [3]
10. A small drum held 60 litres of water. Buckets with capacities of 20,5 litres, 18 litres and 20 litres were filled from the drum.

- (a) Calculate the amount of water which was left in the drum. [3]
- (b) If 60 litres of water is shared in the ratio 3 : 4 : 5, find the least share. [2]

09/02/09

She added 10 litres more in Kwekwe.

(a) On arrival at Kadoma the car had 0,5 litres left in its tank. How much petrol was used? [3]

(b) If the distance between Gweru and Kadoma is 140 km, calculate the volume of petrol used per kilometre. [2]

12. Mr Dube bought a single bed on hire purchase. It was marked \$55 000. He paid 20% deposit and the balance in 11 monthly instalments.

(a) Find the deposit he paid. [2]

(b) Calculate his monthly instalment. [3]



# ZIMBABWE SCHOOL EXAMINATIONS COUNCIL

GRADE SEVEN EXAMINATION, 2005.

## MATHEMATICS

PAPER 2

NOVEMBER 2005 SESSION

Time: 2 hours

### INSTRUCTIONS TO CANDIDATES

1. Answer **all** questions in Section A.
2. Answer **three** questions in Section B.
3. Section A carries 25 marks.
4. Section B carries 15 marks.
5. To obtain full marks for any question, **all working** must be shown.
6. Do **not** measure from given diagrams.
7. Electronic calculators and slide rules **must not** be used in the examination.
8. **Underline** answers and rule off after each answer.

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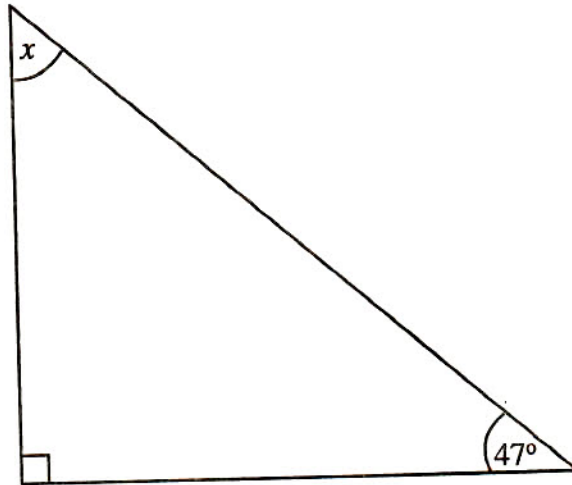
**This question paper consists of 5 printed pages and 3 blank pages.**

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Answer all questions in this section.

1. (a) Find the sum of 4,325 and 3,6. [2]  
(b) Express  $\frac{7}{8}$  as a percentage. [2]

2. Calculate the value of  $x$  in the triangle below.



[3]

3. A farmer put a 4 strand wire fence round his farm with sides measuring 1,734 km, 0,538 km, 1,207 km and 0,916 km.

- (a) Calculate the perimeter of the farm. [2]  
(b) What is the total length of the wire used to fence the farm? [2]

4. Godfrey started work at 8.35 a.m. and finished at 1.05 p.m. on the same day.

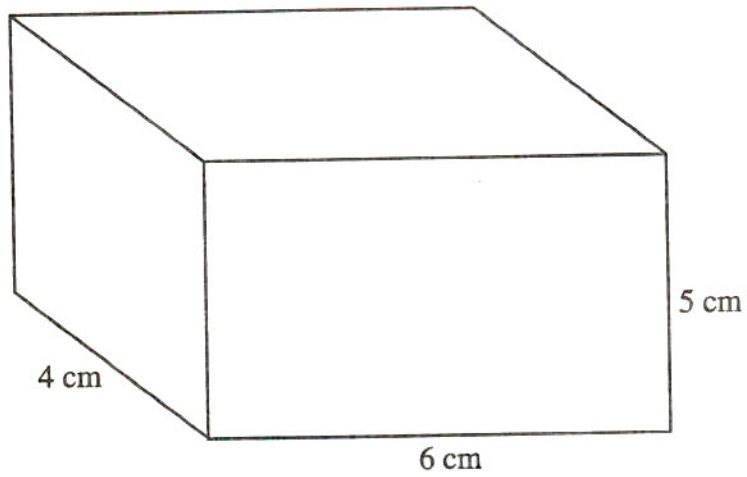
- (a) Find the time he spent at work. [2]  
(b) If he was paid \$10 000 for every 30 minutes he worked, what was his total payment on this day? [2]

5. Mrs Phiri bought some day old chicks and 5% of them died on arrival at home. If 152 chicks were left,

find

- (a) the number of chicks she had bought, [2]  
(b) the number of chicks which died. [1]

6. The diagram below shows a cuboid.



Find the total surface area of the cuboid.

[3]

7. Mr Ncube contributed 500 sweets and Mrs Ncube contributed 5 times as much. The total number of sweets contributed were shared amongst Rudo, Thabo and Tapelo in the ratio 1: 2: 3 respectively.

(a) Find the total number of sweets contributed.

[2]

(b) How many sweets did Thabo get?

[2]

[Turn over

8. The table below shows an incomplete invoice.

INVOICE		
ITEM	\$	C
Blouse	27 000	00
Shoes	19 000	00
Sub Total		
Sales Tax		
Total		

- 01/08/09
- (a) Given that the customer was charged 15% sales tax, calculate the value of the sales tax charged. [2]
- (b) If the customer tendered sixty \$1 000 notes, calculate the change received. [3]
9. Mrs Juru used  $\frac{1}{5}$  of her flour to bake some buns.
- (a) If she used 250 grams of her flour, how much flour did she originally have? [2]
- (b) If each bun weighed 10 grams, find the number of buns that can be baked with the flour that remained. [3]
10. A lorry with a tare of 1,325 tonnes is carrying 500 bricks. Each brick has a mass of 2,836 kg.  
Calculate
- (a) the total mass of the bricks, [2]
- (b) the gross mass of the laden lorry in tonnes. [3]
11. Mrs Bopoto bought a 150 ml bottle full of cough syrup for her baby. The baby took 5 ml of the syrup 3 times per day for a week.
- (a) How many millilitres of the syrup did the baby take in a week? [2]
- (b) Express as a fraction in its lowest terms the amount of the syrup that remained in the bottle after one week. [3]

**12.** A newly resettled farmer drew a plan of his rectangular garden using a scale of 1: 500.

**(a)** If his plan measured 12 cm by 8 cm, calculate in metres, the actual length of the garden. [2]

**(b)** The farmer planted carrots on one fifth of the garden, find this area in  $\text{m}^2$ . [3]

# ZIMBABWE SCHOOL EXAMINATIONS COUNCIL

## GRADE SEVEN EXAMINATION

### MATHEMATICS

PAPER 1

NOVEMBER 2005 SESSION

Time: 2 hours

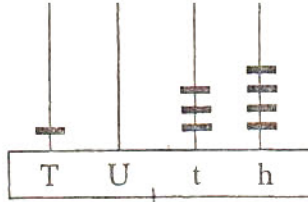
#### INSTRUCTIONS TO CANDIDATES

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5. If you wish to change your answer, **erase it completely** with a pencil rubber and then shade the new choice.
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7. **If you do not understand** the instructions **ask the invigilator** to explain them to you **before you start**.
8. Answer **all** the questions on the separate answer sheet provided.
9. Rough paper will be provided.

---

**This question paper comprises 13 printed pages and 3 blank pages.**

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20/01/2011  
The number represented by the abacus above is

- A 1,034.  
B 10,34. *+ 3/0/100*  
C 134.  
D 1 034.
2. 765 432 to the nearest ten thousand is  
*20/01/2011*  
A 770 000.  
B 766 000.  
C 765 000.  
D 760 000.
3.  $8\frac{7}{9}$  can be written as  
A  $\frac{65}{9}$ .  
B  $\frac{71}{9}$ . *8 \* 9 = 72*  
C  $\frac{79}{9}$ .  
D  $\frac{87}{9}$ .
4. 37,49 rounded off to the nearest whole number is  
*20/01/2011*  
A 37,00.  
B 37,40.  
C 37,50.  
D 38,00
5. The missing number in the pattern 4; 9; 16; ; 36 is  
A 21.  
B 23.  
C 25.  
D 32.

- 109
- A 0,07.
  - B 7,00.
  - C 70.
  - D 700.

31/07/08

7. Ben's span is 17 cm. He measured the width of a room and found that it was 24 spans. What was the actual width?

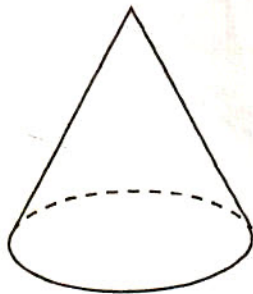
- A 40,8 cm
- B 4,08 m
- C 4 080 cm
- D 408 m

8.  $\frac{48}{15}$  expressed as a mixed number in its lowest terms is

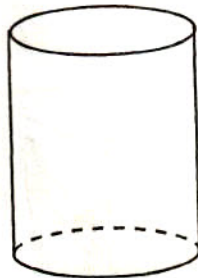
- A  $3\frac{1}{5}$ .
- B  $3\frac{3}{15}$ .
- C  $4\frac{1}{5}$ .
- D  $4\frac{8}{15}$ .

31/07/08

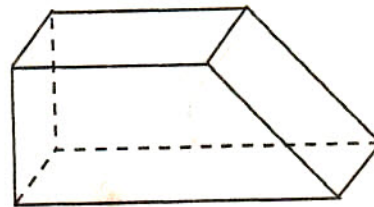
9.



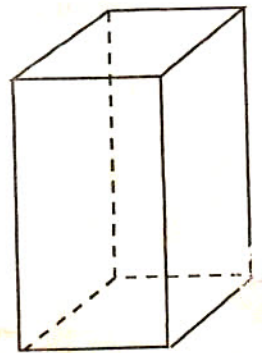
A



B



C



D

[Turn over]

Which of the above shapes is a cone?

show at 16 00 is

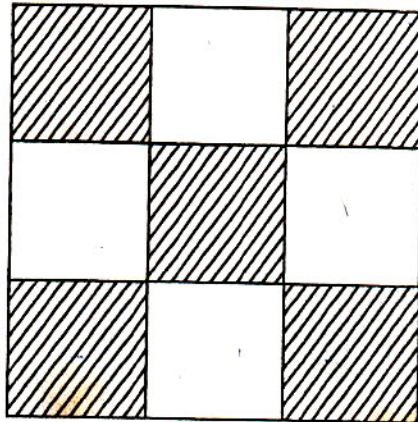
- A 15 42.
- B 15 36.
- C 16 12.
- D 16 24.

11.  $6^2$  is the same as

- A  $6 \times 2$ .
- B  $6 \times 6$ .
- C  $2 \times 2 \times 2 \times 2 \times 2 \times 2$ .
- D  $6 \times 6 \times 6 \times 6 \times 6 \times 6$ .

31/07/09

12.



In the diagram above, what fraction is shaded?

- A  $\frac{4}{9}$
- B  $\frac{1}{2}$
- C  $\frac{5}{9}$
- D  $\frac{2}{3}$

21/07/08

- A 0,6.
- B 6.
- C 60.
- D 600.

31/07/08

14. What is the difference between 211 and 199?

- A 12
- B 112
- C 310
- D 410

31/07/08

15.  $0,002 + 2 + 0,5 =$

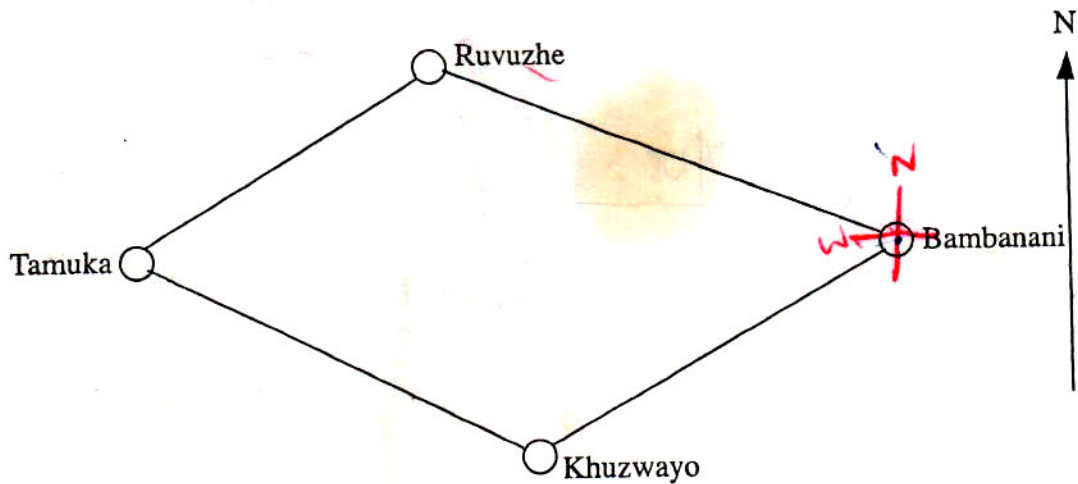
- A 0,009.
- B 0,504.
- C 0,702.
- D 2,502.

31/07/08

16. By how much is the sum of 0,02 and 3 greater than their product?

- A 0,06
- B 2,96
- C 3,02
- D 3,06

17. The diagram below shows a map of some schools.



The direction of Ruvuzhe from Bambanani is

- A South East.
- B North West.
- C South West.
- D North.

[Turn over

A  $\frac{15}{30}$ .

B  $\frac{6}{10}$ .

C  $\frac{3}{5}$ .

D  $\frac{30}{50}$ .

19.  $2\frac{1}{3} - \frac{3}{4} + \frac{7}{8} =$

A  $\frac{17}{24}$ .

B  $2\frac{11}{24}$ .

C  $2\frac{7}{8}$ .

D  $3\frac{5}{24}$ .

20.  $0,3 \times 0,3 \times 0,3 =$

A 0,027.

B 0,270.

C 2,700.

D 27,000.

21. If the dividend is 101,50 and the divisor is 0.5, then the quotient is

A 2,30.

B 20,3.

C 203.

D 2 030.

22. The perimeter, in cm. of a regular hexagon of side 9,5 cm is

A 47,5.

B 54.

C 57.

D 76.

- A 0,2.
- B 2.
- C 20.
- D 200.

24. A helicopter takes 2 minutes to cover a distance of 25 km. Its speed, in km/h, is

- A 12,5.
- B 50,0.
- C 750,0.
- D 1 500,00.

25. On a bus 40% of the passengers were children. There were 54 adults. How many people were on the bus altogether?

- 01/06/07
- A 36
  - B 81
  - C 90
  - D 135

26.  $5\frac{1}{4} \times 1\frac{3}{7} =$

A  $\frac{2}{15}$

B  $7\frac{1}{2}$

C  $5\frac{3}{28}$

D  $6\frac{19}{28}$

27. In 1996, the price of a match box in different shops was \$3,60, \$3,30, \$2,80 and \$2,90. What was the average price?

- A \$3,15
- B \$11,60
- C \$12,60
- D \$50,40

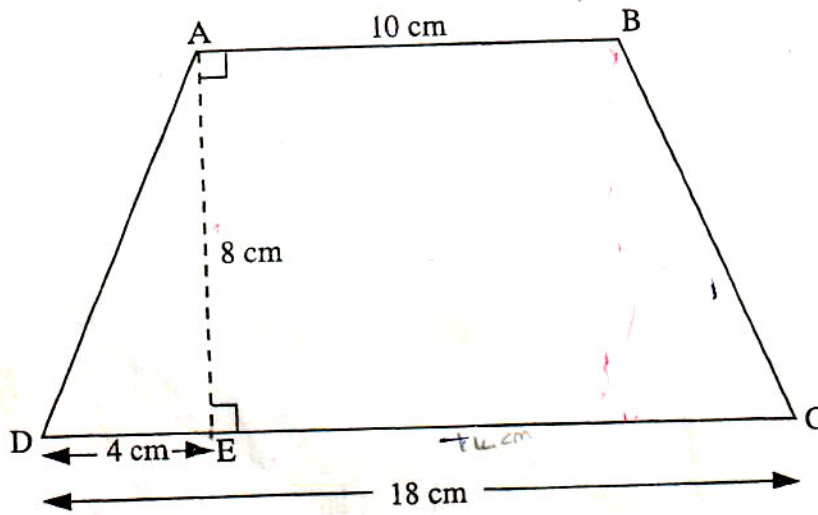
[Turn over

28. Chipo started Grade One in 1980. When did she complete Grade Seven, if she repeated Grade Three and Six?
- A 1986
  - B 1987
  - C 1988
  - D 1989

29. 10 tractors take 8 days to plough a field. How long will it take 16 tractors to do the same job?

- A  $3\frac{1}{4}$  days
- B 5 days
- C  $12\frac{4}{5}$  days
- D 20 days

30.

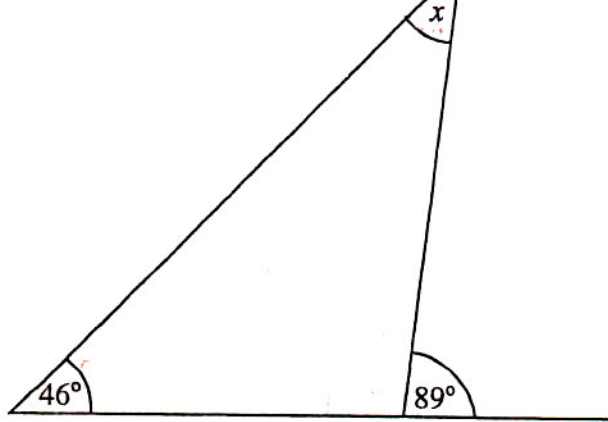


The area of quadrilateral ABCD above is

- A  $180 \text{ cm}^2$ .
- B  $144 \text{ cm}^2$ .
- C  $132 \text{ cm}^2$ .
- D  $112 \text{ cm}^2$ .

31. In 1980, a man borrowed \$1 500 and was charged 4,5% interest per annum. How much did he pay altogether in a year?
- A \$67,50
  - B \$810,00
  - C \$1 567,50
  - D \$2 310,00
32. A 2-metre string was cut in the ratio 2: 3: 5. The shortest piece was
- 60/100*
- A 0,4 m.
  - B 0,6 m.
  - C 1,0 m.
  - D 5,0 m.
33. The sum of  $2^3$  and  $3^2$  is
- A 12.
  - B 16. *2 + 3 = 5*
  - C 17.
  - D 18.
34. A police officer was on duty from 10.45 p.m. to 7.30 a.m. the following day. For how long was he on duty?
- A 3 hours 15 minutes
  - B 7 hours 45 minutes
  - C 8 hours 45 minutes
  - D 18 hours 45 minutes
35. A fuel tank of a car has 60 litres. The car uses 1 litre every 15 km. How much fuel is left in the tank if it covers 135 km?
- A 9 l
  - B 51 l
  - C 56 l
  - D 70 l
36. The radius of a circle is half the length of the
- A arc.
  - B circle.
  - C circumference.
  - D diameter.

[Turn over



The size of the angle marked  $x$  in the triangle above is

- A  $43^\circ$ .
- B  $91^\circ$ .
- C  $135^\circ$ .
- D  $137^\circ$ .

38.  $\left(1\frac{1}{4} - \frac{3}{5}\right) \times 2 =$

A  $\frac{1}{20}$ .

B  $\frac{13}{20}$ .

C  $1\frac{3}{10}$ .

D  $1\frac{9}{10}$ .

39. 3 hours 11 minutes 5 seconds expressed in seconds is

A 665.

B 10 800.

C 11 460.

D 11 465.

40. Justin has \$48,00. If he spends  $\frac{2}{3}$  of it on sweets, then the amount left is

- A \$16,00.
- B \$24,00.
- C \$32,00.
- D \$72,00.

41.  $2,4 \div 0,8 =$

- A 0,03.
- B 0,3.
- C 3.
- D 30.

42. What is the Highest Common Factor of 9, 12 and 18?

- A 3
- B 6
- C 9
- D 12

43. When 75 kg is decreased by 10% the result is

- A 7,5 kg.
- B 65 kg.
- C 67,5 kg.
- D 82,5 kg.

44. Mr Band's rectangular garden measures 12 metres by 8 metres. He fences it putting a pole after every metre. How many poles did he use to fence his garden right round?

- A 32
- B 36
- C 38
- D 40

45. Susan was given a plain paper, 27 cm long and 15 cm wide, to cut out equal triangles each with base 4,8 cm and height 3 cm. The number of triangles she cut was

- A 28.
- B 45.
- C 56.
- D 57.

[Turn over

- A 1 000 ml.
- B 100 ml.
- C 10 ml.
- D 1 ml.

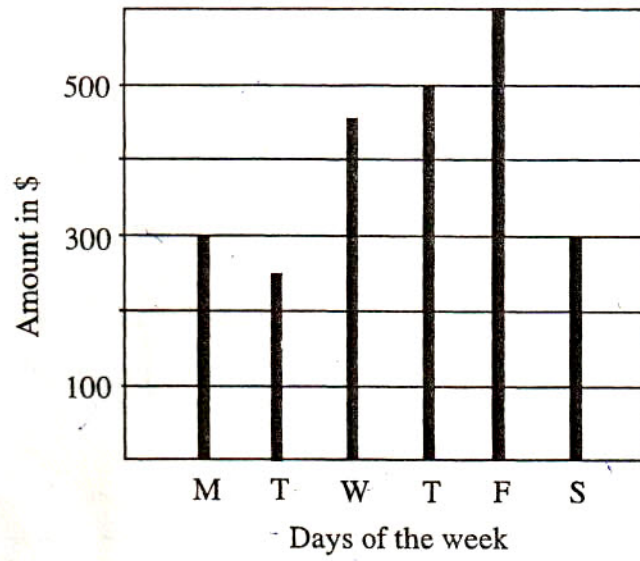
47.  $\frac{3\frac{4}{5} - 2\frac{1}{4}}{6\frac{1}{5}} =$

- A  $\frac{1}{4}$
- B  $1\frac{11}{20}$
- C  $1\frac{4}{5}$
- D  $6\frac{1}{20}$

The table below shows the times, in seconds, taken by four athletes in a 400 m race. Use it to answer questions 48 and 49.

SUSAN	JANE	IAN	CECIL
50,3	49,6	53,7	48,9

- 48 Who came first in the race?
- A Cecil
  - B Ian
  - C Jane
  - D Susan
49. The difference between Jane's and Cecil's times is
- A 0,7 seconds.
  - B 1,3 seconds.
  - C 1,7 seconds.
  - D 7,0 seconds



The store-keeper's expenses for the week were \$2 000. What was the profit expressed as a percentage?

- A  $16\frac{2}{3}$
- B 20
- C  $83\frac{1}{3}$
- D 400

162487



# ZIMBABWE SCHOOL EXAMINATIONS COUNCIL

GRADE SEVEN EXAMINATION, 2006.

**MATHEMATICS**  
PAPER 1

**002/1**

OCTOBER 2006 SESSION

Time: 2 hours

## INSTRUCTIONS TO CANDIDATES

1. Read **all** the instructions carefully.
2. Do **not** open this booklet until you are told to do so by the invigilator.
3. Use **only** an HB pencil for all entries on the answer sheet.
4. When you are told to start, choose **one** correct answer from the suggested answers and shade it **very dark** as shown in the examples at the top of the answer sheet.
5. If you wish to change your answer, **erase it completely** with a pencil rubber and then shade the new choice.
6. If **more than one** box is shaded for any one answer, that answer will be regarded as **wrong**.
7. **If you do not understand** the instructions **ask** the invigilator to explain them to you **before you start**.
8. Answer **all** the questions on the separate answer sheet provided.
9. Rough paper will be provided.

---

**This question paper comprises 12 printed pages.**

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20/01/2012

1. 901 341 written in words is

- A. ninety one thousand three hundred and forty one.
- B. nine hundred and one thousand three and forty one.
- C. ninety one thousand three hundred and fourteen.
- D. nine hundred and one thousand three hundred and forty one.

2. The value of 6 in 4 635 is

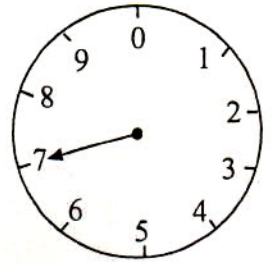
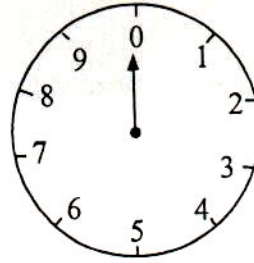
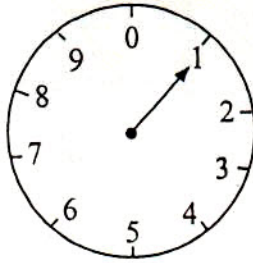
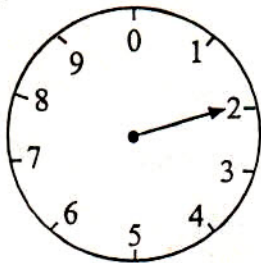
20/01/2012

- A. 6.
- B. 60.
- C. 600.
- D. 6 000.

3. The fraction with the biggest value is

- A.  $\frac{7}{10}$ .
- B.  $\frac{1}{2}$ .
- C.  $\frac{5}{6}$ .
- D.  $\frac{2}{3}$ .

4.



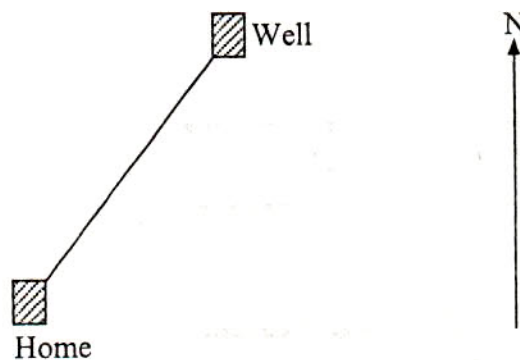
The number shown on the picture is

- A. 2 017.
- B. 2 071.
- C. 2 107.
- D. 2 170.

5. 4% as a decimal fraction is
- A. 0,044.
  - B. 0,4.
  - C. 0,25.
  - D. 0,04.
6. The time 00 01 is the same as
- A. one minute to twelve noon.
  - B. one minute past midnight.
  - C. one minute to midnight
  - D. one minute past noon.
7.  $4\ 670,32 \div 10 =$
- A. 46 703,2.
  - B. 4 670,32.
  - C. 467,032.
  - D. 46,732.
8.  $6\frac{1}{5} - 5\frac{1}{4} =$
- A.  $1\frac{1}{9}$ .
  - B.  $1\frac{1}{20}$ .
  - C.  $\frac{19}{20}$ .
  - D.  $\frac{10}{20}$ .
9. 4 litres plus 8 millilitres equals
- A. 12 ml.
  - B. 32 ml.
  - C. 4 008 ml.
  - D. 4 800 ml.

[Turn over

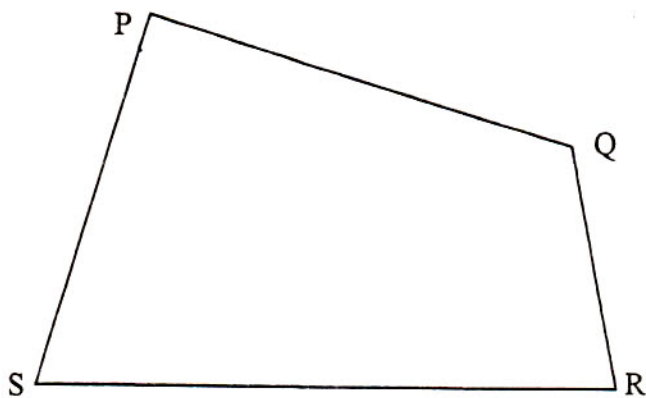
10.



The direction of the well from home is

- A. North West.
  - B. South West.
  - C. South East.
  - D. North East.
11. 37% of 2 m is
- A. 37 cm.
  - B. 47 cm.
  - C. 73 cm.
  - D. 74 cm.
12. Expressed in dollars 7 cents is
- A. \$0,07.
  - B. \$0,70.
  - C. \$7,00.
  - D. \$70,00.

13.



Shape PQRS is a

- A. triangle.
  - B. quadrilateral.
  - C. pentagon.
  - D. hexagon.
14. 200 litres of water are pumped into a tank in every five minutes. What is the volume of water pumped in an hour?
- A. 195 l
  - B. 205 l
  - C. 1 000 l
  - D. 2 400 l
15. \$30 increased by 50% is
- A. \$80.
  - B. \$60.
  - C. \$45.
  - D. \$15.
16. Numbers 2; 7; 11; 13 and 19 are
- A. even.
  - B. odd.
  - C. prime.
  - D. factors.
17.  $7,83 \div 0,9 =$
- A. 0,87.
  - B. 8,07.
  - C. 8,7.
  - D. 87,0.

[Turn over

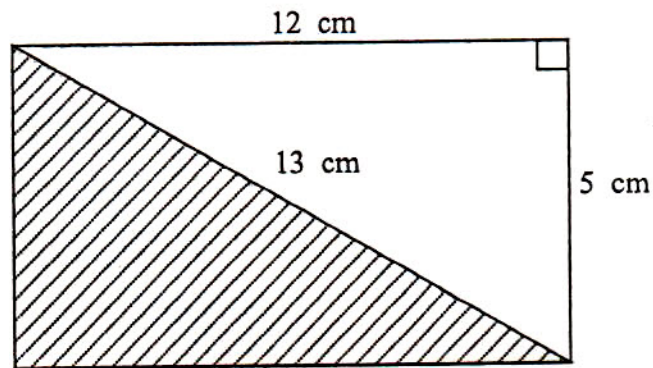
18. From 6 take away 3,450 the answer is

- A. 2,450.
- B. 2,540.
- C. 2,550.
- D. 72,650.

19. Reducing 64 by 4 and adding 30 gives

- A. 48.
- B. 90.
- C. 98.
- D. 286.

20.



The area of the unshaded part in the diagram shown is

- A.  $30 \text{ cm}^2$ .
- B.  $36 \text{ cm}^2$ .
- C.  $60 \text{ cm}^2$ .
- D.  $65 \text{ cm}^2$ .

21.  $\frac{1}{2}$  of 24 added to  $\frac{3}{5}$  of 100 gives

- A. 12.
- B. 60.
- C. 72.
- D. 124.

22.  $40 \times 36 \div 3 - 20 =$

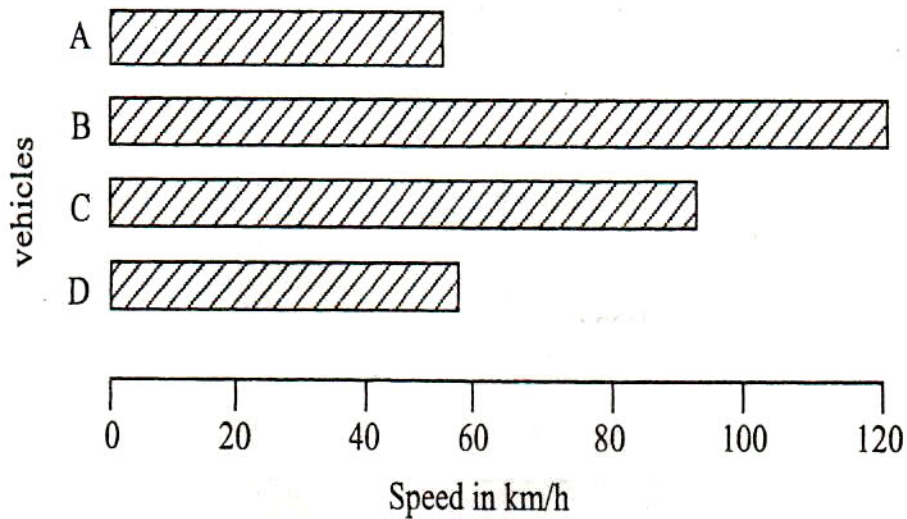
- A. 32.
- B. 240.
- C. 460.
- D. 480.

23. Rounded off to the nearest hundredth 293.629 becomes
- A. 293,70.
  - B. 293.63.
  - C. 293,62.
  - D. 30,00.
24.  $(7 + 4) \times 3 =$
- A. 9.
  - B. 19.
  - C. 25.
  - D. 33.
25. Paul, John, James and Maria have masses of 59 kg; 61 kg; 48 kg and 42 kg respectively. Their average mass is
- A. 52,5 kg.
  - B. 55 kg.
  - C. 210 kg.
  - D. 220 kg.
26. Susan had \$3,60. She spent 90c. The fraction of her money left was
- A.  $\frac{1}{4}$ .
  - B.  $\frac{3}{5}$ .
  - C.  $\frac{3}{4}$ .
  - D.  $\frac{4}{5}$ .
27. The sum of 251 and 649 when divided by 45 gives
- A. 20.
  - B. 398.
  - C. 900.
  - D. 945.
28.  $(56 + 16) \div (6 \times 2) =$
- A. 6.
  - B. 12.
  - C. 24.
  - D. 72.

[Turn over

29. The sum of  $3^3$  and  $2^5$  is
- A. 5.
  - B. 27.
  - C. 32.
  - D. 59.
30. A cubic centimetre of steel has a mass of 9 g. How many cubic centimetres of steel have a mass of 1,08 kg?
- A. 120.
  - B. 111,1
  - C. 9,72
  - D. 0,12
31.  $(12 + 15) + 3 = (12 + x) + (15 + 3)$  the value of  $x$  is
- A. 1.
  - B. 3.
  - C. 9.
  - D. 15.
32. What is the cost of a loaf of bread when 4 loaves cost \$29 200?
- A. \$730.
  - B. \$1 578.
  - C. \$7 300.
  - D. \$7 400.
33. Mr Bote's plot has an area of 14 ares. Mr Jumbe's has  $1\,050\text{ m}^2$ . Mr Bote's plot is bigger by
- A.  $1\,064\text{ m}^2$ .
  - B.  $1\,036\text{ m}^2$ .
  - C. 24,5 ares.
  - D. 3,5 ares.

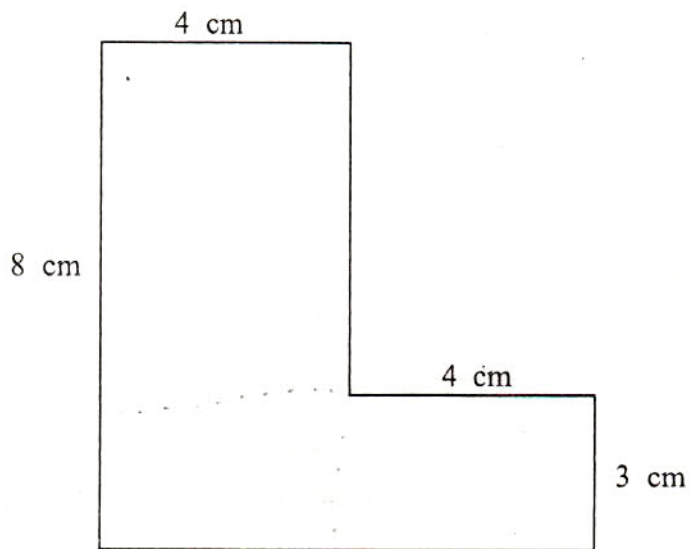
34. The graph illustrates speeds of vehicles. Which of the vehicles A, B, C, or D is the second fastest?



35. A lorry was loaded with  $24 \text{ m}^3$  of sand.  $\frac{1}{8}$  of the sand was spilt along the way. The amount of sand left in the lorry was
- A.  $3 \text{ m}^3$ .  
 B.  $6 \text{ m}^3$ .  
 C.  $12 \text{ m}^3$ .  
 D.  $21 \text{ m}^3$ .
36. The Mtetwa family drank  $1\frac{1}{2}$  litres of milk everyday during the month of November. How many litres is this altogether?
- A. 46  
 B. 45  
 C. 43  
 D. 42

[Turn over

37.



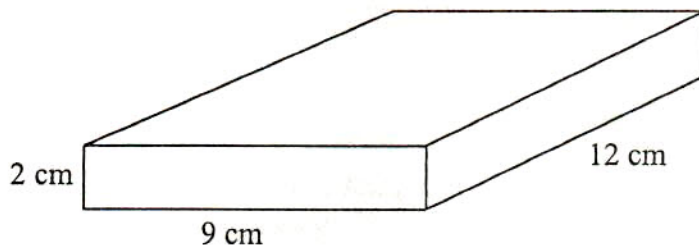
The area of the above shape is

- A.  $64 \text{ cm}^2$ .  
 B.  $44 \text{ cm}^2$ .  
 C.  $20 \text{ cm}^2$ .  
 D.  $19 \text{ cm}^2$ .
38. 48 200 square metres in hectares is
- A. 4 820.  
 B. 48,2.  
 C. 4,82.  
 D. 0,482.
39. The area of a triangle whose base is 8 cm and height 6 cm 5 mm is
- A.  $52 \text{ cm}^2$ .  
 B.  $48\frac{1}{2} \text{ cm}^2$ .  
 C.  $26 \text{ cm}^2$ .  
 D.  $14\frac{1}{2} \text{ cm}^2$ .
40. The value of 3 in 4,237 km is
- A. 300 m.  
 B. 30 m.  
 C.  $\frac{3}{10}$  m.  
 D.  $\frac{3}{100}$  m.

41. When a lorry is empty its mass is 0,250 tonnes. It carries a load of 0,567 tonnes . Its gross mass is
- A. 0,817 t.
  - B. 0,592 t.
  - C. 0,567 t.
  - D. 0,317 t.

42. In a sale, a jacket was reduced by 20% to \$12 000. The price before the sale was
- A. \$1 500.
  - B. \$9 600.
  - C. \$14 400.
  - D. \$15 000.

43.



The volume of this cuboid above is

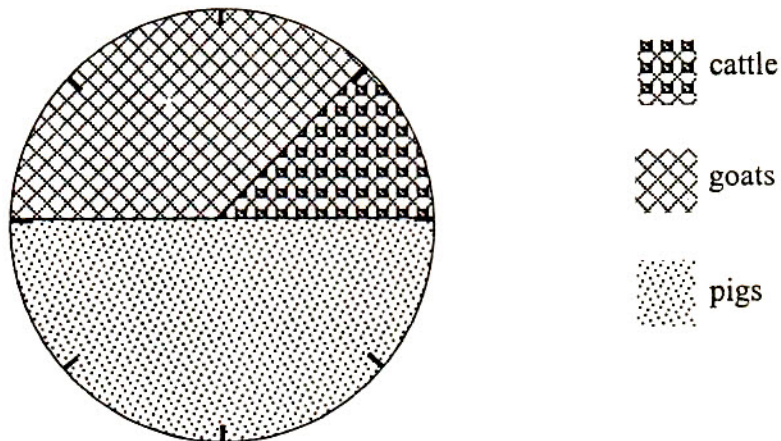
- A.  $216 \text{ cm}^3$ .
  - B.  $108 \text{ cm}^3$ .
  - C.  $24 \text{ cm}^3$ .
  - D.  $23 \text{ cm}^3$ .
44. The difference between 12 multiplied by 4 and 12 divided by 4 is
- A. 32.
  - B. 45.
  - C. 48.
  - D. 51.
45. Mr Chanetsa had \$5 235 in his account. He made a withdrawal of \$250 on Monday and he deposited \$1 300 on Tuesday. His new balance is
- A. \$6 285.
  - B. \$5 285.
  - C. \$4 985.
  - D. \$3 985.



[Turn over

46. Jan uses the scale 1: 500 to draw the plan of a house. If the length on the plan is 6,5 cm, the actual length of the house is
- A. 65,00 m  
 B. 56,50 m  
 C. 32,50 m  
 D. 3,25 m
47. The quotient is 12,5. The divisor is 4. What is the dividend?
- A. 3,125  
 B. 8,5  
 C. 16,5  
 D. 50,0
48. John was 15 years a decade ago. How old would he be after two decades?
- A. 45 years  
 B. 25 years  
 C. 20 years  
 D. 10 years

The pie chart below represents 800 domestic animals on a farm. Use it to answer questions 49 and 50.



49. The number of cattle on the farm is
- A. 100.  
 B. 300.  
 C. 400.  
 D. 500.
50. The total number of goats and pigs is
- A. 300.  
 B. 400.  
 C. 500.  
 D. 700.

221612



# ZIMBABWE SCHOOL EXAMINATIONS COUNCIL

GRADE SEVEN EXAMINATION, 2006

**MATHEMATICS**  
PAPER 2

**002/2**

OCTOBER 2006 SESSION

Time: 2 hours

## INSTRUCTIONS TO CANDIDATES

1. Answer **all** questions in Section A.
2. Answer **three** questions in Section B.
3. Section A carries 25 marks.
4. Section B carries 15 marks.
5. To obtain full marks for any question, **all working** must be shown.
6. Do **not** measure from given diagrams.
7. Electronic calculators and slide rules **must not** be used in the examination.
8. **Underline** answers and rule off after each answer.

**This question paper consists of 5 printed pages and 3 blank pages.**

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## Section A (25 marks)

Answer all questions in this section.

1. Find the value of

(a)  $11 - 6 + 4$ ,

[1]

(b)  $1 - 0,999$ .

[1]

2. Simplify

(a)  $10^5 - 72\,649$ ,

[2]

(b)  $5\frac{5}{6} + 3\frac{1}{9}$ .

[2]

3. The area of a rectangle is  $45\text{ cm}^2$ . If the width is 3 cm find

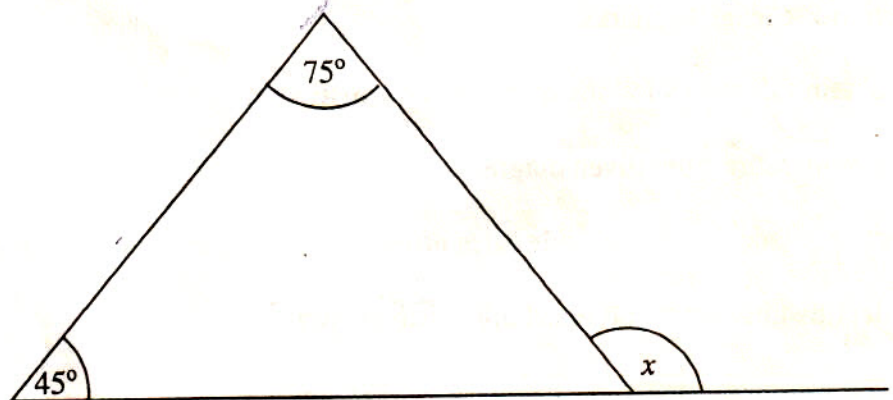
(a) the length,

[2]

(b) the perimeter.

[2]

4.



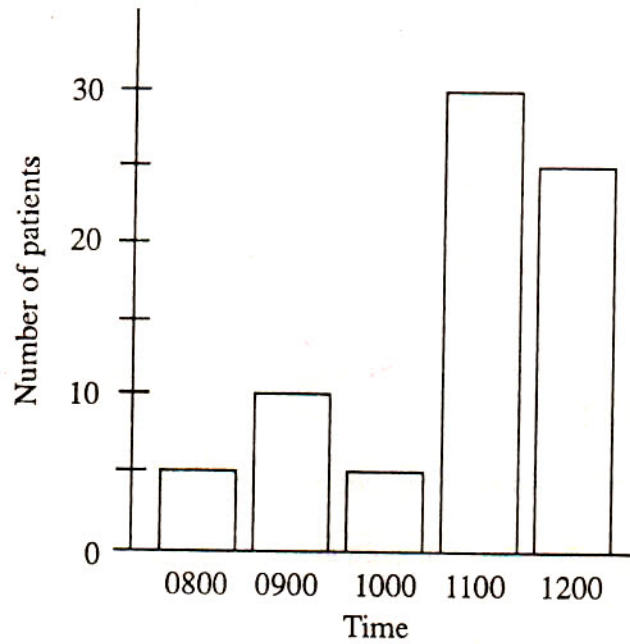
Find the value of angle  $x$  in the diagram above.

[3]

5. A watch loses 2 minutes every hour. If it is set correct at 0000 hours, calculate the time it will show at the end of the day.

[3]

6.



The bar graph shows the number of patients who consulted a doctor at Gura Hospital.

(a) At what time did most patients consult the doctor? [1]

(b) Calculate the total number of patients who consulted the doctor. [2]

7. The marked price of a pair of socks was \$780. Aubrey was given 15% discount for paying cash. Calculate the amount he paid. [3]

8. (a) In a clock, the hour hand moves from noon to 9 p.m. How many degrees does the hour hand move? [1]

(b) How much less than a complete revolution is this? [2]

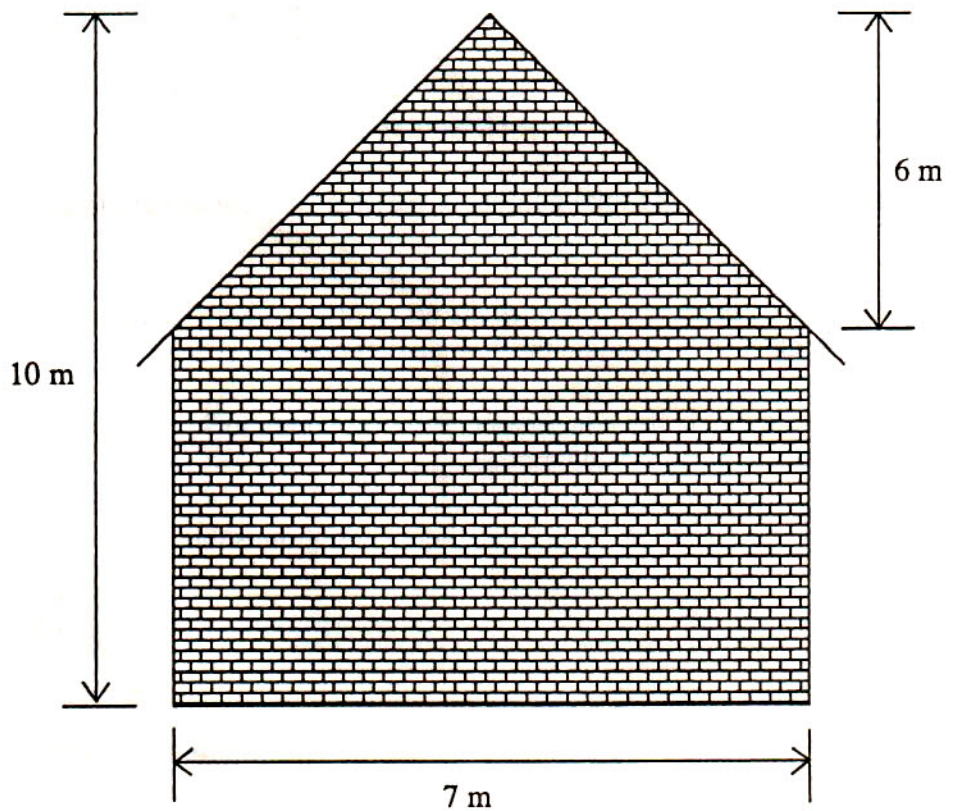
[Turn over

## Section B (15 marks).

Answer any **three** questions in this section.

9. A man was 52 years old in 2002.
- (a) In what year was he born? [2]
- (b) If his wife is 10 years younger than him, when was she born? [3]
10. Mr Sibanda borrowed \$3 600 from a bank that charged him 25% interest per annum. He paid back over a period of 24 months.
- (a) Find the interest charged in 24 months. [3]
- (b) Calculate the total amount he paid back. [2]

11.



Mr Chida painted part of a building shown in the diagram.

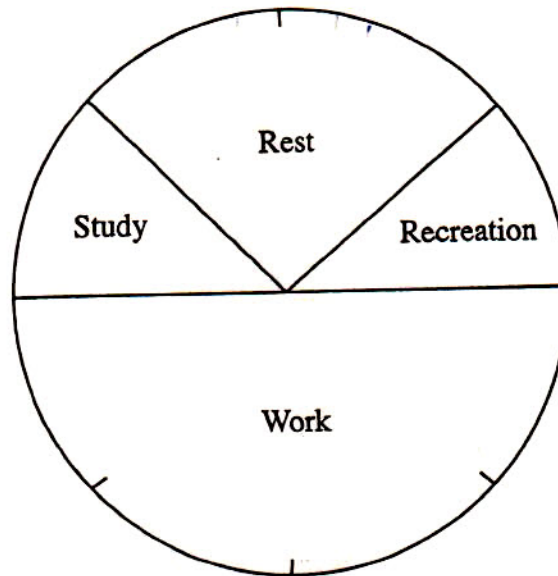
- (a) Calculate the area of the wall he painted. [3]
- (b) How many litres of paint were required, if 2 litres of paint were needed for every  $7 \text{ m}^2$ ? [2]

12. Jabulani travelled 120 km at an average speed of 90 km/h.

(a) How long did the journey take? [2]

(b) If he wanted to complete the journey in 1 hour 12 minutes, what would be his speed? [3]

13.



The pie chart shows how Mr Tito spends his time during the day from 6.00 a.m. to 6.00 p.m. Calculate

(a) the decimal fraction of the day he spends resting, [3]

(b) the time, in hours, he spends studying. [2]

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**ZIMBABWE SCHOOL EXAMINATIONS COUNCIL**  
GRADE SEVEN EXAMINATION

**MATHEMATICS**

**002/1**

Paper 1

**OCTOBER 2007 SESSION**

**Time: 2 hours**

**INSTRUCTIONS TO CANDIDATES**

1. Read **all** the instructions carefully.
2. **Do not** open this booklet until you are told to do so by the invigilator.
3. Use only an HB pencil for all entries on the answer sheet.
4. When you are told to start, choose **one** correct answer from the suggested answers and shade it **very dark** as shown in the examples at the top of the answer sheet.
5. If you wish to change your answer, **erase** it **completely** with a pencil rubber and then shade the new choice.
6. If **more** than **one** box is shaded for any one answer, that answer will be regarded as **wrong**.
7. **If you do not understand** the instructions, **ask** the invigilator to explain them to you **before you start**.
8. Answer **all** the questions on the separate answer sheet provided.
9. Rough paper will be provided.

---

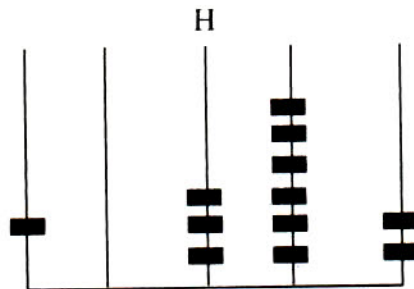
**This question paper comprises 14 printed pages and 2 blank pages.**

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**[Turn over**

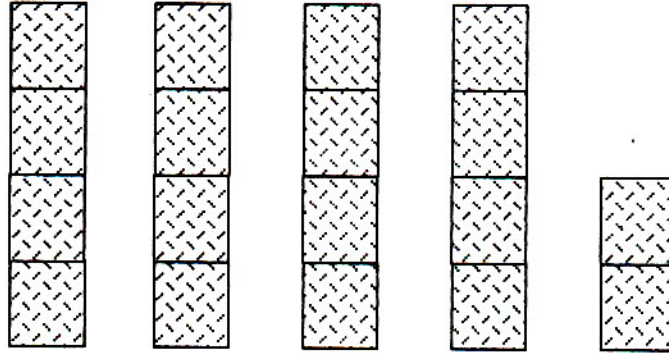
1.



The abacus represents

- A. 13.62.  
 B. 1 362.  
 C. 2 631.  
 D. 10 362.
2. Three million two hundred and six thousand and twenty three in figures is
- A. 320 623.  
 B. 3 020 623.  
 C. 3 206 023.  
 D. 30 020 623.
3. 1 789 is less than 2 036 by
- A. 1 357.  
 B. 1 257.  
 C. 347.  
 D. 247.
4. 75 952 to nearest ten thousand is
- A. 75 900.  
 B. 75 950.  
 C. 76 000.  
 D. 80 000.
5.  $\frac{37}{4}$  expressed as a mixed number is
- A.  $37\frac{1}{4}$ .  
 B.  $9\frac{1}{4}$ .  
 C.  $8\frac{1}{4}$ .  
 D.  $3\frac{7}{4}$ .

6.



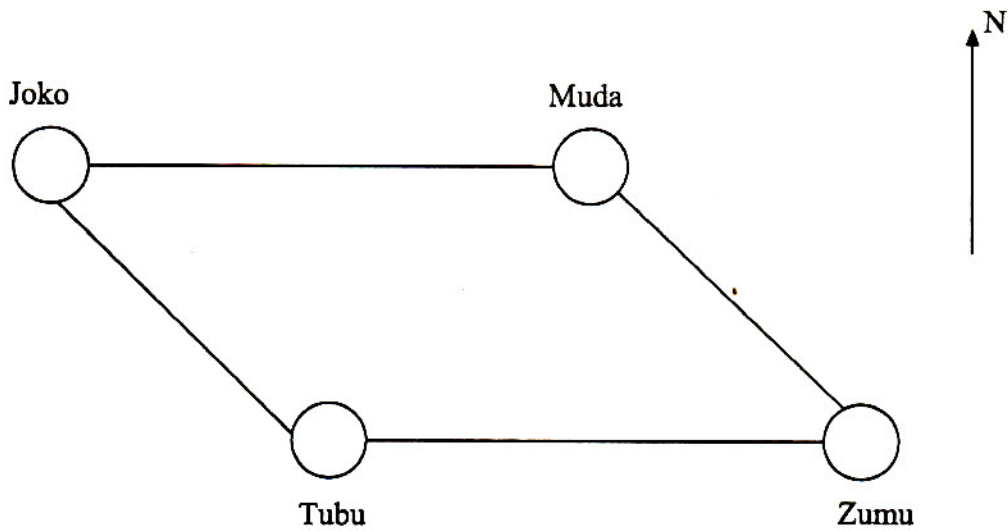
The number shown on the diagram above is

- A.  $4\frac{3}{4}$ .
- B.  $4\frac{1}{2}$ .
- C.  $16\frac{1}{2}$ .
- D. 18.
7. \$70,04 in cents is
- A. 704.
- B. 7 004.
- C. 7 040.
- D. 7 400.
8. The unit used to measure volume is
- A. cm.
- B.  $\text{cm}^2$ .
- C.  $\text{cm}^3$ .
- D.  $\text{m}^2$ .
9. The change from \$1 000 after buying 2 buns at \$87 each and an apple for \$650 is
- A. \$176,00.
- B. \$264,00.
- C. \$724,00.
- D. \$824,00.
10. The total surface area of a rectangular prism measuring 10 cm by 8 cm by 5 cm is
- A.  $400 \text{ cm}^2$ .
- B.  $340 \text{ cm}^2$ .
- C.  $170 \text{ cm}^2$ .
- D.  $250 \text{ cm}^2$ .

[Turn over

11. A bag of wheat has a mass of  $25\frac{1}{2}$  kg. The mass of 15 such bags is
- A.  $382\frac{1}{2}$  kg.
  - B.  $372\frac{1}{2}$  kg.
  - C.  $255\frac{1}{2}$  kg.
  - D.  $127\frac{1}{2}$  kg.
12.  $\frac{90}{120}$  to its lowest terms is
- A.  $\frac{5}{8}$ .
  - B.  $\frac{15}{24}$ .
  - C.  $\frac{3}{4}$ .
  - D.  $\frac{5}{6}$ .
13. Mrs Shelly's car has 38,5 l of petrol in its fuel tank. At the service station, 21,5 l are poured into the tank to fill it up. The capacity of the tank is
- A. 69 l.
  - B. 60 l.
  - C. 59 l.
  - D. 17 l.
14.  $63,1 + 10 =$
- A. 631,0.
  - B. 630,1.
  - C. 63,10.
  - D. 6,31.
15. Peter's pace is 0,65 m. He walks 4 000 paces from home to school. Peter's home from school is
- A. 6 500 m.
  - B. 4 000 m.
  - C. 3 950 m.
  - D. 2 600 m.

16.



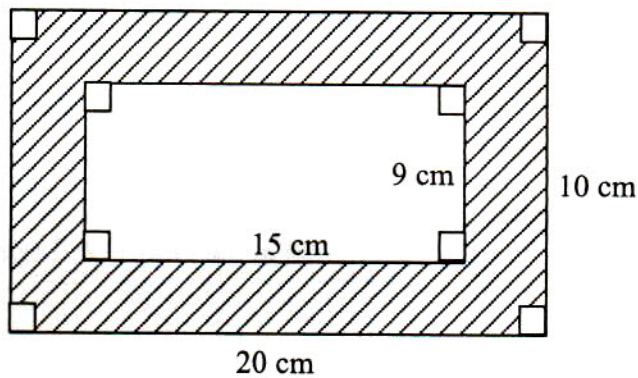
The map shows the positions of four villages. What is the direction of Joko from Zumu?

- A. South East
  - B. North West
  - C. North East
  - D. South West
17. 0,25 of 40 minus 0,75 of 12 equals
- A. 1.
  - B. 9.
  - C. 10.
  - D. 19.
18. The number of 20 ml doses in a  $1\frac{1}{5}$  litre bottle of cough syrup is
- A. 20.
  - B. 24.
  - C. 60.
  - D. 75.
19.  $(10^2 \times 3) + (10^1 \times 3) =$
- A. 60.
  - B. 90.
  - C. 210.
  - D. 330.

[Turn over

20. The product of 24 and 16 is
- A. 384.
  - B. 168.
  - C. 144.
  - D. 40.
21.  $2\frac{1}{3} \times 4\frac{1}{2} \div 1\frac{1}{2} =$
- A.  $15\frac{3}{4}$
  - B.  $8\frac{1}{9}$
  - C. 7
  - D.  $4\frac{2}{3}$
22. From 7 420 take away 6 784 and add 21. The result is
- A. 655.
  - B. 656.
  - C. 657.
  - D. 658.
23. Musonda sent a postal order for \$880,00. He paid \$900,00 to the Post Office. The Commission he paid was
- A. \$ 5.
  - B. \$ 10.
  - C. \$ 15.
  - D. \$ 20.
24. A wall is  $15,5 \text{ m}^2$  in area. Sue painted 0,7 of it. The area of the wall not painted is
- A.  $4,65 \text{ m}^2$ .
  - B.  $9,3 \text{ m}^2$ .
  - C.  $10,85 \text{ m}^2$ .
  - D.  $21,7 \text{ m}^2$ .
25. When 78 is divided by 13 and the result added to 49 the answer is
- A. 6.
  - B. 33.
  - C. 44.
  - D. 55.

26. A farmer had 200 bags of rapoko. He sold  $\frac{1}{4}$  of them and gave  $\frac{1}{5}$  of them to the poor. The number of bags left were
- A. 40.  
 B. 50.  
 C. 90.  
 D. 110.
27. The difference between the sum of 9 and 8 and their difference is
- A. 1.  
 B. 16.  
 C. 17.  
 D. 72.
- 28.



The area of the shaded part is

- A.  $65 \text{ cm}^2$ .  
 B.  $75 \text{ cm}^2$ .  
 C.  $135 \text{ cm}^2$ .  
 D.  $200 \text{ cm}^2$ .
29. The perpendicular height of a triangle whose base is 11 cm and area is  $44 \text{ cm}^2$  is
- A. 88 cm.  
 B. 22 cm.  
 C. 8 cm.  
 D.  $5\frac{1}{2}$  cm.

[Turn over

30.  $5\frac{7}{8}$  tonnes in kilograms is
- A. 5 125.
  - B. 5 375.
  - C. 5 625.
  - D. 5 875.
31. A school has 600 children. If 98% of them were present on the closing day, how many were absent?
- A. 12
  - B. 13
  - C. 587
  - D. 588
32. 3,5 hours in minutes is
- A. 185.
  - B. 210.
  - C. 230.
  - D. 350.
33. Kate, Molly and Jura shared \$12 000 in the ratio 1: 2: 3 respectively. Molly received
- A. \$2 000.
  - B. \$4 000.
  - C. \$6 000.
  - D. \$8 000.
34. How many lines of symmetry does a square have?
- A. 1
  - B. 2
  - C. 3
  - D. 4

35. The table below shows Tapiwa's marks in four subjects.

Subject	Marks Obtained
Mathematics	$\frac{19}{20}$
English	$\frac{16}{25}$
Art	$\frac{35}{50}$
Music	$\frac{49}{100}$

In which subject did she get the least marks?

- A. Art  
 B. English  
 C. Mathematics  
 D. Music
36. How many right angles are there in  $\frac{3}{4}$  of a revolution?
- A. 1  
 B. 2  
 C. 3  
 D. 4
37. If 186 mm of rain fell in January, then the average daily rainfall was
- A. 5 mm.  
 B. 6 mm.  
 C. 7 mm.  
 D. 8 mm.
38.  $2^6 - 2^4 =$
- A. 16.  
 B. 32.  
 C. 48.  
 D. 64.

Turn over

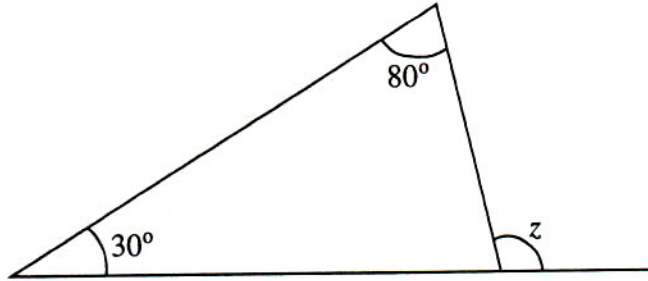
39. The value of 50% of  $(5,75 + 0,25)$  is

- A. 3,125.
- B. 3.
- C. 2,125.
- D. 2.

40. A wholesaler sold shirts for \$725 each. A retailer bought 10 of these shirts and sold them for \$905 each. How much profit did he make altogether?

- A. \$180
- B. \$1 800
- C. \$7 250
- D. \$9 050

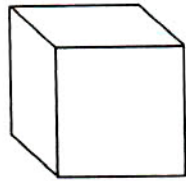
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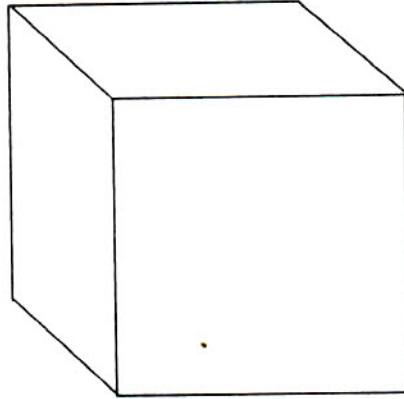
The angle marked  $z$  in the diagram is

- A.  $50^\circ$ .
- B.  $70^\circ$ .
- C.  $110^\circ$ .
- D.  $240^\circ$ .

42.



2 cm cube



6 cm cube

The diagram shows 2 cubes. The number of small cubes which can fit into the large cube is

- A. 3.
- B. 6.
- C. 12.
- D. 27.

[Turn over

Study the time table and answer questions 43 and 44.

<b>Programme</b>	<b>Time</b>
News	8.00 a.m.
Weather Forecast	8.07 a.m.
Talk Show	8.10 a.m.
Music by request	8.30 a.m.
Schools Broadcast	10.00 a.m.
Health Matters	11.40 a.m.

43. The shortest programme was

- A. News.
- B. Weather Forecast.
- C. Music by request.
- D. Schools broadcast.

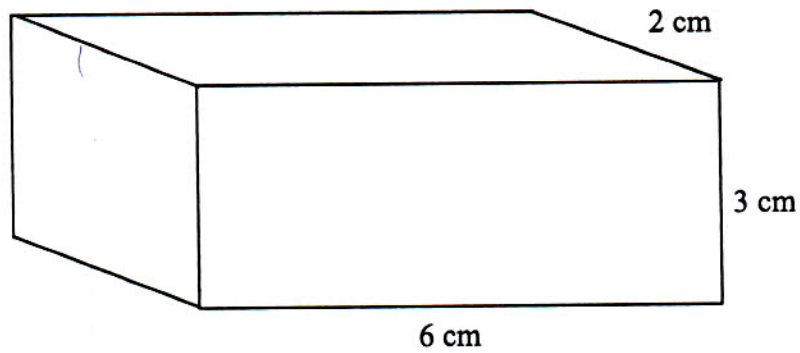
44. The longest programme was

- A. News.
- B. Talk Show.
- C. Schools Broadcast.
- D. Health Matters.

45. A farmer planted 256 maize seeds in a row. If he planted 36 rows, then the total number of maize seeds he planted was

- A. 8 216.
- B. 9 116.
- C. 9 216.
- D. 9 226.

46.

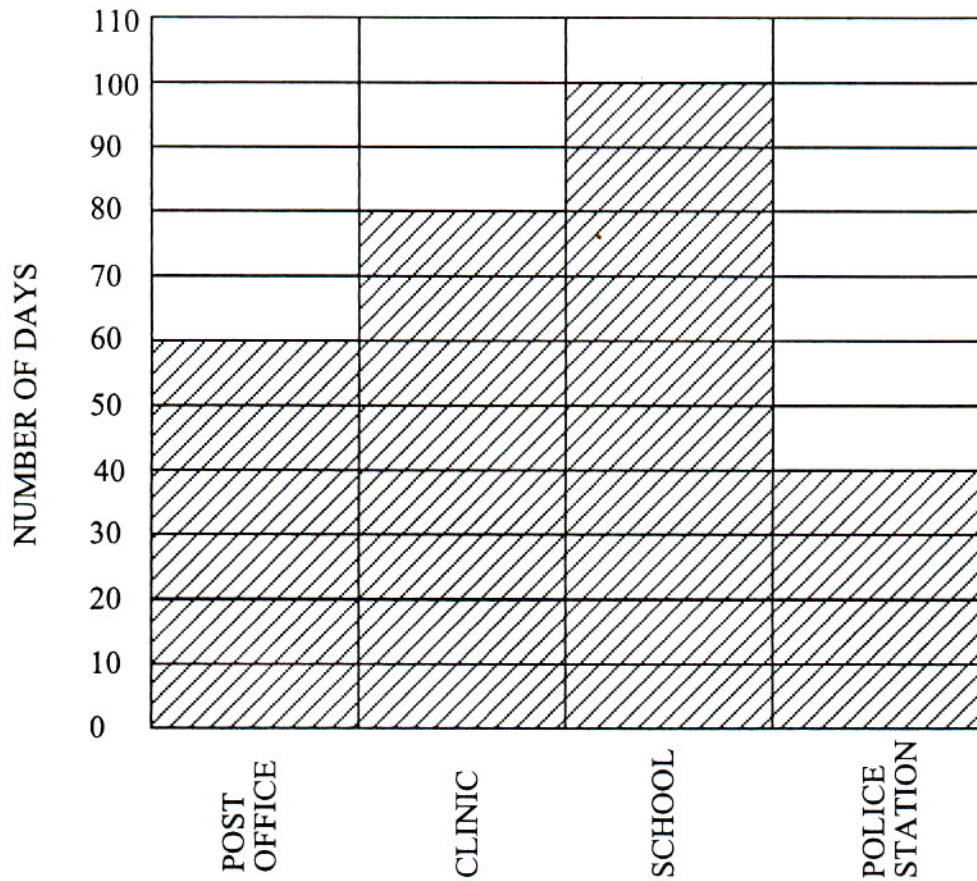


The volume of the box in  $\text{cm}^3$  is

- A. 6.
  - B. 11.
  - C. 18.
  - D. 36.
47. Mrs Shortly earns  $7\frac{1}{2}\%$  interest per annum from her \$30 000 in her account. Her interest per annum is
- A. \$14 500.
  - B. \$12 000.
  - C. \$ 4 500.
  - D. \$ 2 250.
48. The perimeter of an isosceles triangle with sides 6,3 cm and a base 7,5 cm is
- A. 12,6 cm.
  - B. 13,8 cm.
  - C. 19,1 cm.
  - D. 20,1 cm.

[Turn over

The graph below shows places painted by Mr Mpala and the number of days spent at each place. Use it to answer questions 49 and 50.



49. How many more days did Mr Mpala spend painting the school than the post office?
- A. 40  
 B. 60  
 C. 100  
 D. 160
50. The total number of days he spent painting the clinic and the police station was
- A. 120.  
 B. 140.  
 C. 150.  
 D. 160.

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**ZIMBABWE SCHOOL EXAMINATIONS COUNCIL**  
**GRADE SEVEN EXAMINATION**

**MATHEMATICS**  
**PAPER 2**

**002/2**

**OCTOBER 2007 SESSION**

**Time: 2 hours**

**INSTRUCTIONS TO CANDIDATES**

1. Answer **all** questions in Section A.
2. Answer **three** questions in Section B.
3. Section A carries 25 marks.
4. Section B carries 15 marks.
5. To obtain full marks for any question, **all working** must be shown.
6. Do **not** measure from given diagrams.
7. Electronic calculators and slide rules **must not** be used in the examination.
8. **Underline** answers and rule off after each answer.

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**This question paper consists of 4 printed pages.**

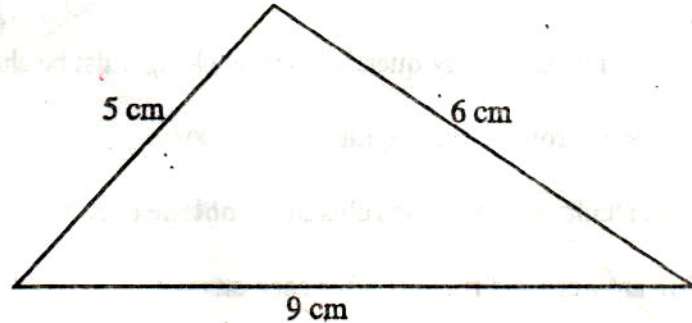
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## Section A (25 marks)

Answer all questions in this section.

1. Find the sum of 46 and 54. [2]
2. Find the value of
  - (i)  $7 - 3,25$ , [1]
  - (ii)  $21,2 + 2,1 - 3$ . [2]
3. Express
  - (i) 6 millimetres in centimetres, [1]
  - (ii) 40,75 hectares in ares. [1]
4. Write down the following dates in Standard International (SI) notation.
  - (i) 27<sup>th</sup> March 1970 [1]
  - (ii) Zimbabwe's independence day this year [2]

5.



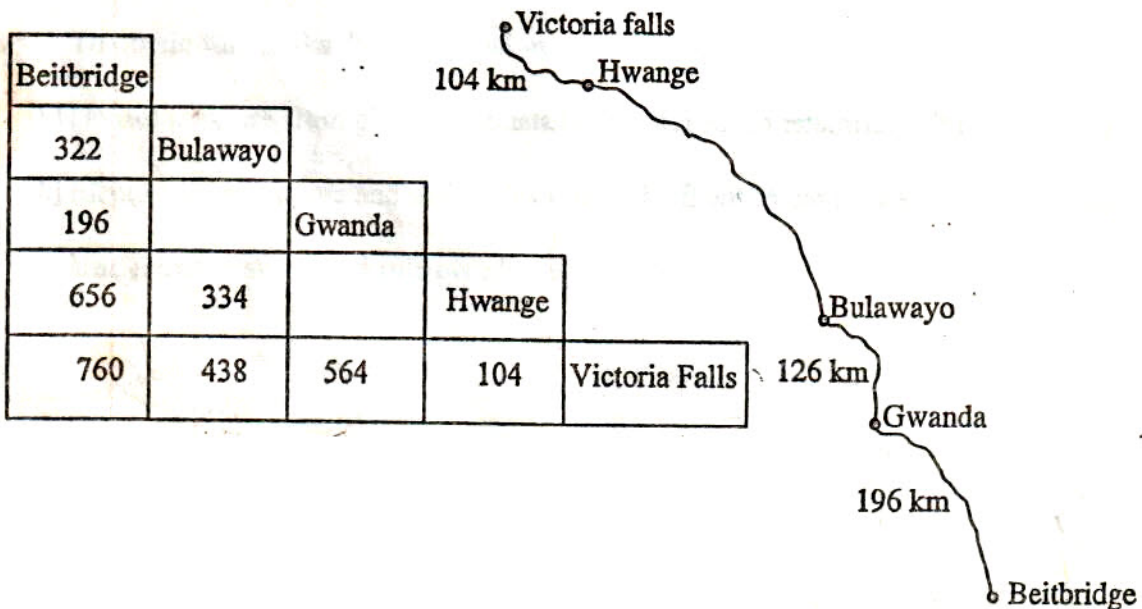
- (i) What name is given to the above triangle? [1]
  - (ii) Find its perimeter. [1]
6. On a bus, there are 60 passengers. If  $\frac{2}{5}$  of them are men,  $\frac{1}{4}$  are children and the rest are women, find the number of women on the bus. [4]
7. Molly rode a bicycle to a growth point located  $22\frac{1}{2}$  km away from her home. She cycled at an average speed of 15 km/h. If she left home at 12.42 p.m, calculate the time she arrived at the growth point. [4]

8. John had \$25 000 in his bank account. He withdrew \$17 000 in June and deposited \$12 000 in August.
- (i) Find his balance by the end of June. [2]
- (ii) If he was given 5% interest on his balance, find his new balance at the beginning of September. [3]

Section B (15 marks).

Answer any three questions in this section.

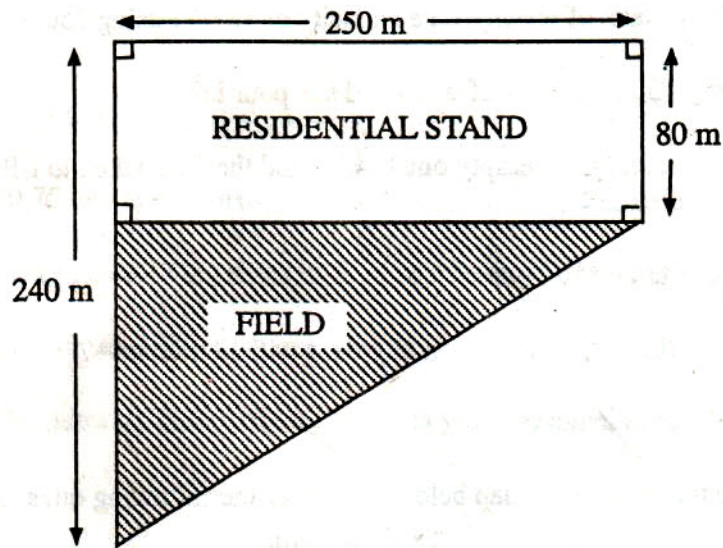
9. Mrs Mvenge filled a tank of water with a capacity of 187,5 l using 750 ml bottles.
- (i) How many 750 ml bottles of water did she pour in? [2]
- (ii) If it took 30 seconds to empty one bottle, find the time taken to fill the tank in hours and minutes. [3]
10. 9 men take 16 days to build a house.
- (i) Working at the same rate, how many days will 12 men take? [3]
- (ii) Express 16 days in hours. [2]
11. Use the distance table and road map below to answer the following questions.



- (i) Calculate the distance between Gwanda and Hwange. [2]
- (ii) Timothy drove from Beitbridge to Victoria Falls. At Hwange the reading on his car's odometer was 123 361 km. What was his car's odometer reading at Beitbridge? [3]

[Turn over

12. A woman sold 3 dozen eggs on a Sunday. The following day she sold three times as much. If one dozen has 12 eggs, find
- (i) the total number of eggs sold on the two days. [3]
- (ii) the average sales for the two days. [2]
13. The diagram below represents Mrs Garapo's plot. The plot is divided into a residential stand and field.



- (i) Find the perimeter of the residential stand. [2]
- (ii) Calculate the area of the field. [3]

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**ZIMBABWE SCHOOL EXAMINATIONS COUNCIL**  
**GRADE SEVEN EXAMINATION**

**MATHEMATICS**  
**PAPER 1**

**002/1**

**OCTOBER 2008 SESSION**

Time: 2 hours

**INSTRUCTIONS TO CANDIDATES**

1. Read **all** the instructions carefully.
2. **Do not** open this booklet until you are told to do so by the invigilator.
3. Use only an HB pencil for all entries on the answer sheet.
4. When you are told to start, choose **one** correct answer from the suggested answers and shade it **very dark** as shown in the examples at the top of the answer sheet.
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6. If **more than one** box is shaded for any one answer, that answer will be regarded as **wrong**.
7. **If you do not understand** the instructions, **ask** the invigilator to explain them to you **before you start**.
8. Answer **all** the questions on the separate answer sheet provided.
9. Rough paper will be provided.

---

**This question paper consists of 13 printed pages and 3 blank pages.**

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20/01/2012  
1. Three hundred and fifty thousand in figures is

- A. 350 000.
- B. 305 000.
- C. 300 500.
- D. 300 005.

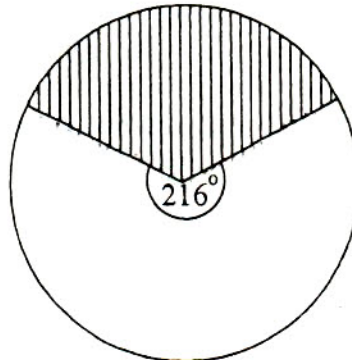
20/01/2012  
2. Rounded off to the nearest hundred 245 becomes

- A. 200.
- B. 240.
- C. 250.
- D. 300.

20/01/2012  
3. The value of 7 in 347,38 is

- A. 7 000.
- B. 700.
- C. 70.
- D. 7.

4.



The shaded part expressed as a decimal fraction of the whole shape is

- A. 1,44.
- B. 0,4.
- C. 0,33.
- D. 0,2.

5. 0,75 can be written as

A.  $\frac{3}{40}$ .

B.  $\frac{3}{4}$ .

C.  $5\frac{7}{10}$ .

D.  $7\frac{1}{2}$ .

6. Half past midnight is

A. 1230.

B. 2430.

C. 0030.

D. 0130.

7.  $0,31 + 4 + 0,84 =$

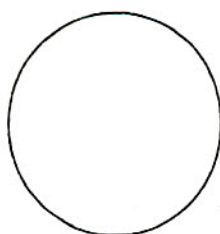
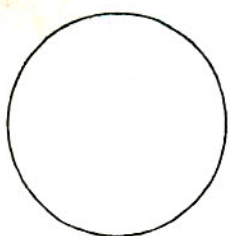
A. 1,15

B. 1,19

C. 4,15

D. 5,15

8. The diagram represents cakes.



What is the number of cakes expressed as a mixed number?

A.  $3\frac{5}{6}$

B.  $3\frac{5}{8}$

C.  $3\frac{1}{2}$

D.  $2\frac{5}{8}$

Turn over

9.  $1\frac{3}{8}$  and  $1\frac{1}{2}$  added together give
- A.  $2\frac{7}{8}$ .
- B.  $2\frac{1}{2}$ .
- C.  $2\frac{3}{4}$ .
- D.  $1\frac{7}{8}$ .
10. What is the value of 3 five cent coins, 2 five dollar coins, 1 ten dollar note, 3 fifty dollar notes and 1 five hundred dollar note?
- A. \$650,25
- B. \$650,35
- C. \$670,15
- D. \$685,00
11. Anna was facing East. She turned one complete revolution and a half right angle in a clockwise direction. Then she is facing
- A. South East.
- B. North West.
- C. North East.
- D. East.
12. Arranged in ascending order the fractions  $\frac{5}{6}; \frac{2}{3}; \frac{1}{2}; \frac{3}{4}$  become
- A.  $\frac{5}{6}; \frac{3}{4}; \frac{2}{3}; \frac{1}{2}$ .
- B.  $\frac{1}{2}; \frac{3}{4}; \frac{2}{3}; \frac{5}{6}$ .
- C.  $\frac{1}{2}; \frac{2}{3}; \frac{3}{4}; \frac{5}{6}$ .
- D.  $\frac{5}{6}; \frac{3}{4}; \frac{1}{2}; \frac{2}{3}$ .

13.  $2\,035 - 850 + 43 =$

- A. 1 992
- B. 1 228
- C. 1 142
- D. 893

14. Increasing 107 by 64 gives

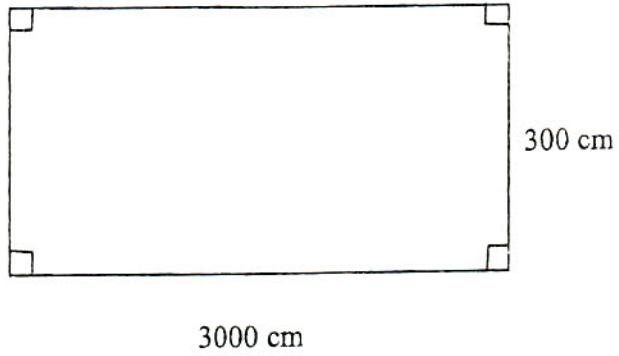
- A. 747.
- B. 171.
- C. 63.
- D. 43.

15.  $64 \times 4 =$

- A.  $4^3$
- B.  $2^6$
- C.  $8^3$
- D.  $4^4$

**Turn over**

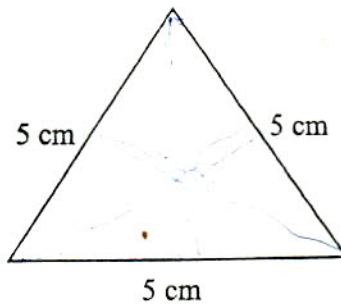
16



The area of this rectangle in  $\text{m}^2$  is

- A. 90.
- B. 66.
- C. 45.
- D. 33.

17.



How many lines of symmetry does the shape have?

- A. 0
- B. 1
- C. 2
- D. 3

18.  $16 \div 8 + 3 \times 9 =$

- A. 155
- B. 45
- C. 38
- D. 29

19. Dividing the product of 8 and 40 by 16 gives

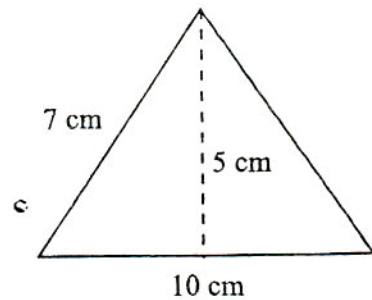
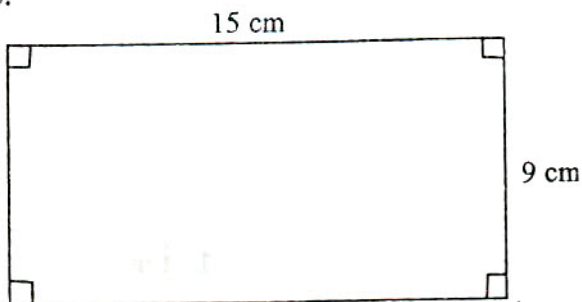
- A. 80.
- B. 64.
- C. 42.
- D. 20.

20. The perimeter of a square garden with sides 12 cm is
- A. 144 cm.
  - B. 72 cm.
  - C. 48 cm.
  - D. 24 cm.
21.  $\frac{60}{8}$  as a mixed number in the lowest terms is
- A.  $6\frac{3}{8}$ .
  - B.  $6\frac{1}{2}$ .
  - C.  $7\frac{3}{8}$ .
  - D.  $7\frac{1}{2}$ .
22. How long does a lorry take to travel 75 km at 100 km/hr?
- A. 2 h 55 min.
  - B. 1h 20 min.
  - C. 45 min.
  - D. 25 min.
23. If  $17,52 + n = 4,8$  therefore  $n$  is
- A. 365.
  - B. 36,5.
  - C. 13,6.
  - D. 3,65.
24. The change from buying a pair of trousers worth \$315 is \$85. The money tendered is
- A. \$400.
  - B. \$230.
  - C. \$130.
  - D. \$120.
25. 9 340c and \$15,00 give the sum of
- A. \$108,40.
  - B. \$ 93,55.
  - C. \$ 93,25.
  - D. \$ 77,40.

26. 6 265 divided by 7 added to 267 gives
- A. 885.
  - B. 895.
  - C. 1 062.
  - D. 1 162.
27. James, Sam, Mary and Anna had 20; 10; 50 and 4 sweets respectively. They shared the sweets equally among themselves. The number of sweets each got was
- A. 20.
  - B. 21.
  - C. 28.
  - D. 84.
28.  $3\frac{3}{5}$  kg mealie-meal was put into 4 equal bags. Each bag had
- A. 800 g.
  - B. 900 g.
  - C. 1 000 g.
  - D. 1 900 g.
29. A customer bought goods worth \$120 000. He was charged 15% Value Added Tax. The amount he paid was
- A. \$ 18 000.
  - B. \$102 000.
  - C. \$138 000.
  - D. \$148 000.
30. How many  $\text{cm}^3$  are in 3,875 l?
- A. 38,75  $\text{cm}^3$
  - B. 387,5  $\text{cm}^3$
  - C. 3 875  $\text{cm}^3$
  - D. 38 750  $\text{cm}^3$
31. In its simplest form  $\frac{36}{54}$  is
- A.  $\frac{3}{4}$ .
  - B.  $\frac{2}{3}$ .
  - C.  $\frac{4}{6}$ .
  - D.  $\frac{18}{27}$ .

32. The diameter of a circle is
- radius  $\div 2$ .
  - radius  $\times 2$ .
  - circumference  $\times 2$ .
  - circumference  $\div 2$ .
33. Mr Dhono travelled 280 km in 4 hours. His average speed was
- 60 km/h.
  - 70 km/h.
  - 284 km/h.
  - 1 120 km/h.
34. The number which is a factor of 162 is
- 26.
  - 14.
  - 9.
  - 7.

35.



The total area of the two shapes is

- $25 \text{ cm}^2$ .
  - $110 \text{ cm}^2$ .
  - $135 \text{ cm}^2$ .
  - $160 \text{ cm}^2$ .
36. A dress in a shop was marked \$80 000. Three months later the price was increased to \$100 000. What was the percentage increase?
- 80%
  - 25%
  - 20%
  - 2,5%

Turn over

37. A regular hexagon with sides 13 cm long has a perimeter of

- A. 19 cm.
- B. 65 cm.
- C. 78 cm.
- D. 91 cm.

Juru				
721	Jongwe			
94	560	Jiti		
428	600	900	Jana	
125	983	300	186	Jena

Use the distance table above to answer questions 38 and 39.

38. The longest distance is between

- A. Jongwe and Jena.
- B. Jiti and Jana.
- C. Juru and Jiti.
- D. Jana and Jena.

39. A motorist travelled from Jiti to Jena at an average speed of 100 km/h. The time taken to travel the journey is

- A. 3 h.
- B. 6 h.
- C. 9 h.
- D. 12 h.

40. If the quotient is 800 and the divisor is 0,08 then the dividend is

- A. 10 000.
- B. 640.
- C. 100.
- D. 64.

41. Dividing  $8\frac{2}{5}$  by  $2\frac{5}{8}$  and subtracting  $1\frac{1}{2}$  gives

A.  $1\frac{3}{5}$ .

B.  $1\frac{7}{10}$ .

C.  $2\frac{3}{10}$ .

D.  $3\frac{1}{5}$ .

42.  $8 + 8 + 8 + 8 + 8 + 8 =$

A.  $6^8$

B.  $8 + 6$

C.  $8 \times 6$

D.  $8^6$

43.  $5\frac{1}{3} + 1\frac{7}{9} =$

A.  $9\frac{13}{27}$

B. 3

C.  $2\frac{1}{3}$

D.  $\frac{1}{3}$

44.  $\frac{3}{4}$  of a day -  $\frac{1}{3}$  of a day in hours is

A. 9.

B. 10.

C. 12.

D. 13.

45. James opened a savings account with \$100 000 in June. In July he deposited \$50 000 and withdrew \$60 000 in September. His balance is

A. \$90 000.

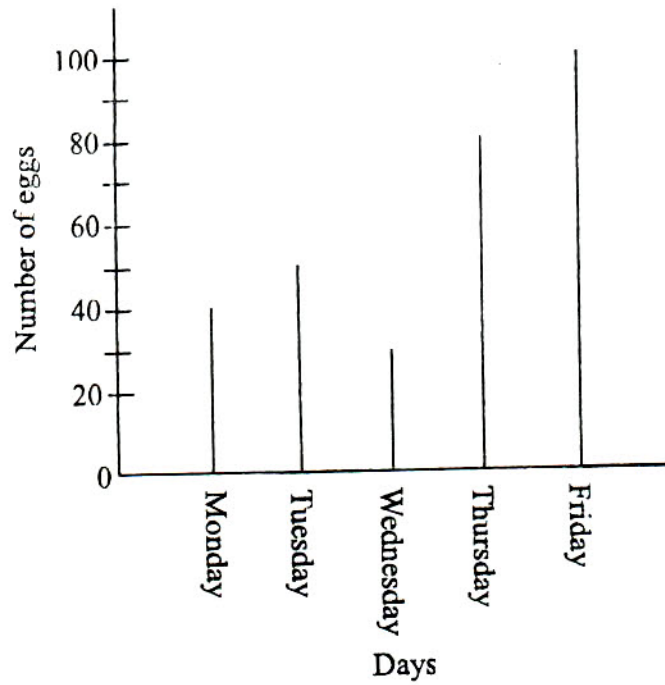
B. \$110 000.

C. \$150 000.

D. \$210 000.

Turn over

46. John's pace is 40 cm. He walked round his bedroom in 26 paces. The perimeter of his bedroom is
- A. 1 040 m.
  - B. 840 m.
  - C. 10,4 m.
  - D. 8,4 m.
47. On an 80 km journey Sihle travelled 50 km by bus and the rest of the journey by bicycle. At what average speed did she travel by bicycle if she took 3 hours to complete the rest of the journey?
- A.  $26\frac{2}{3}$  km/h
  - B. 22 km/h
  - C.  $16\frac{2}{3}$  km/h
  - D. 10 km/h
48. In 2003 Fadzai was four years old. Her mother was eight times the age of Fadzai. So, Fadzai's mother was born in
- A. 1932.
  - B. 1971.
  - C. 1991.
  - D. 1999.



The graph above shows the number of eggs laid by hens in five days. Use it to answer questions 49 and 50.

49. The hens produced the least number of eggs on
- A. Monday.
  - B. Friday.
  - C. Wednesday.
  - D. Tuesday.
50. The average number of eggs for the five days is
- A. 300.
  - B. 290.
  - C. 60.
  - D. 58.

002631



**ZIMBABWE SCHOOL EXAMINATIONS COUNCIL**  
**GRADE SEVEN EXAMINATION**

**MATHEMATICS**  
**PAPER 2**

**002/2**

**OCTOBER 2008 SESSION**

**Time: 2 hours**

**INSTRUCTIONS TO CANDIDATES**

1. Answer **all** questions in Section A.
2. Answer **three** questions in Section B.
3. Section A carries 25 marks.
4. Section B carries 15 marks.
5. To obtain full marks for any question, **all working** must be shown.
6. Do **not** measure from given diagrams.
7. Electronic calculators and slide rules **must not** be used in the examination.
8. **Underline** answers and rule off after each answer.

---

**This question paper consists of 6 printed pages and 2 blank pages.**

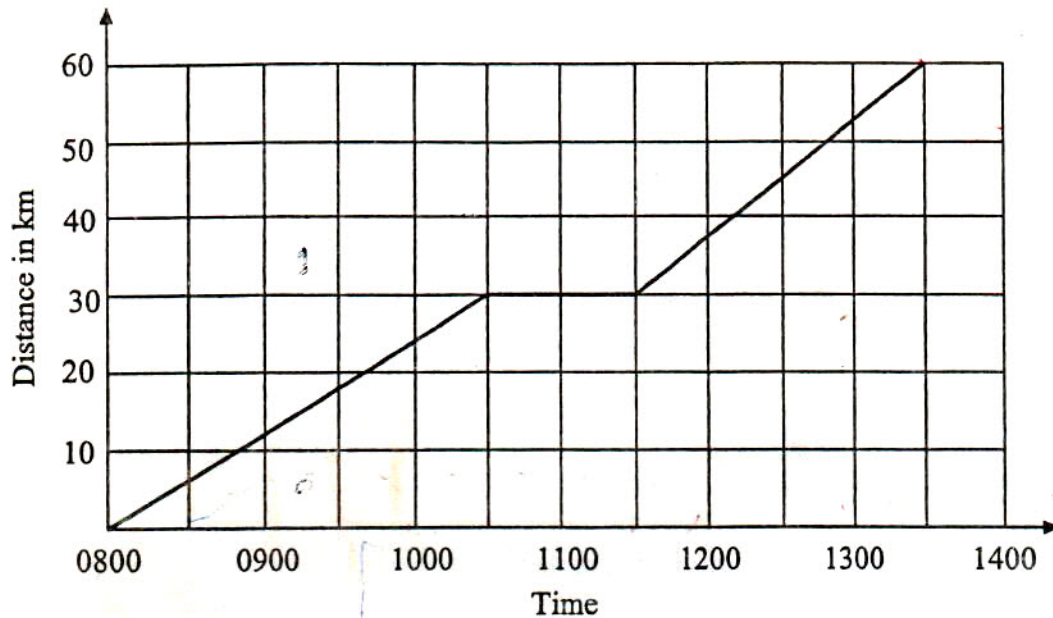
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## Section A (25 marks)

Answer *all* questions in this section.

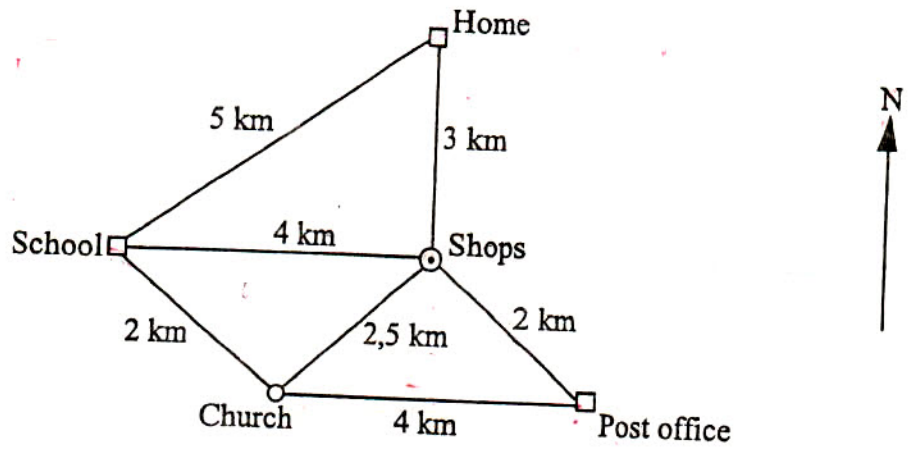
- 1 Find the product of 59 and 0,06. [2]
- 2 Express
- (a) 46 in Roman numerals, [1]
- (b) 574 in expanded index form. [1]
- 3 Copy and complete each of the following statements using the symbols =; <; > to make them true.
- (a)  $\frac{3}{5}$    $\frac{3}{4}$  [1]
- (b)  $3^2$    $2^3$  [1]
- (c) 0,45   $\frac{9}{20}$  [1]
- 4 Find the value of
- (a)  $\frac{0,04}{0,5}$  in decimal form, [2]
- (b)  $6 + 4 \times 10$ . [2]

- 5 The graph shows Tatenda's journey by bicycle from Nharira Business Centre to Chivhu town. She had a puncture along the way and mended it.



- (a) Write down the time in hours she took to mend the puncture. [1]
- (b) Calculate her average speed for the whole journey to the nearest kilometre per hour. [3]
- 6 Mr Nyathi, Mrs Zimba and Miss Tsoka started a business. They invested \$800, \$600 and \$1 000 respectively.
- (a) Express their contributions as a ratio in its simplest form. [2]
- (b) They made a profit of \$6 000 and shared it according to the ratio of their contributions. Calculate Mrs Zimba's profit. [3]

- 7 The diagram below shows Joe's village map.



- (a) Write down the direction of the school from Joe's home. [1]
- (b) Joe is at the shops facing the school. He turns in a clockwise direction to face the Post Office.  
Find the number of right angles he turns. [1]
- (c) On a particular day Joe travels directly to school but passes through the shops on his way back home.  
How much longer does he travel on his way back? [3]

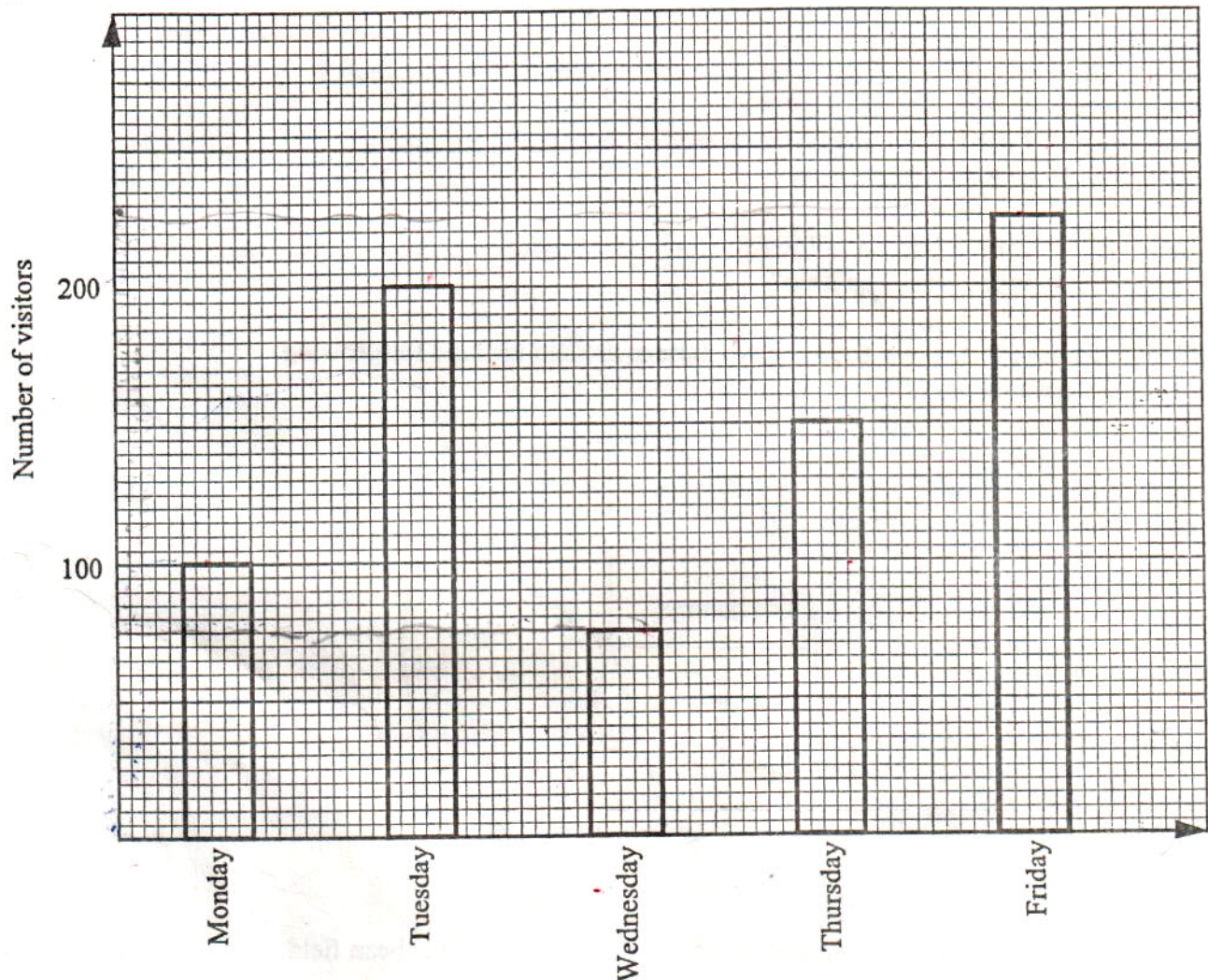
## Section B (15 marks).

Answer any **three** questions in this section.

- 8 A rectangular swimming pool has a capacity of  $80 \text{ m}^3$ . It is 8 m long and 2 m deep.

- (a) Find the width of the pool. [3]  
 (b) Calculate the surface area of the water in the pool. [2]

9

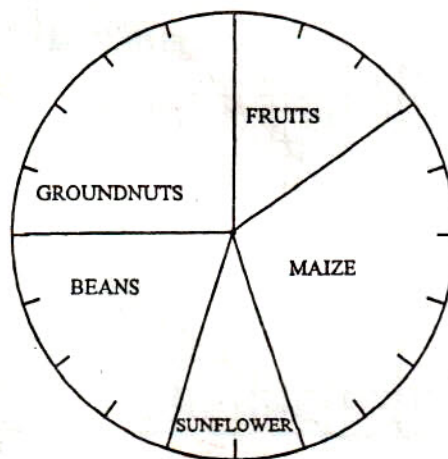


The graph shows the number of visitors to the National Heroes' Acre in a particular week.

- (a) Which day had the largest number of visitors? [1]  
 (b) How many more people visited the Heroes' Acre on Friday than on Wednesday? [2]  
 (c) Find the total number of people who visited the heroes' Acre during this particular week. [2]

[Turn over

- 10 (a) A car travels at an average speed of 90 kilometres per hour.  
How long will it take to complete a 120 kilometre journey? [2]
- (b) It took another car 1 hour 30 minutes to complete the same distance.  
Find its average speed in kilometres per hour. [3]
- 11 320 women were ferried to an agricultural show by 64 seater buses.
- (a) Find the number of buses used to ferry the women at once if all of them were seated. [2]
- (b) If each bus was allowed to have 16 standing passengers, how many buses would be used? [3]
- 12 The pie-chart below shows how a farmer divided his land for growing different crops.



- (a) If his farm had an area of 15 ha, find the area of the bean field. [2]
- (b) If 1 ha. of sunflower earned him \$20 000, how much did he earn from the sunflower. [3]



**ZIMBABWE SCHOOL EXAMINATIONS COUNCIL**  
**GRADE SEVEN EXAMINATION**

**MATHEMATICS**  
**PAPER 1**

**002/1**

**OCTOBER 2009 SESSION**

Time: 2 hours

**INSTRUCTIONS TO CANDIDATES**

1. Read **all** the instructions carefully.
2. **Do not** open this booklet until you are told to do so by the invigilator.
3. Use only an HB pencil for all entries on the answer sheet.
4. When you are told to start, choose **one** correct answer from the suggested answers and shade it **very dark** as shown in the examples at the top of the answer sheet.
5. If you wish to change your answer, **erase** it **completely** with a pencil rubber and then shade the new choice.
6. If **more** than **one** box is shaded for any one answer, that answer will be regarded as **wrong**.
7. **If you do not understand** the instructions, **ask** the invigilator to explain them to you **before you start**.
8. Answer **all** the questions on the separate answer sheet provided.
9. Rough paper will be provided.

---

**This question paper consists of 14 printed pages and 2 blank pages.**

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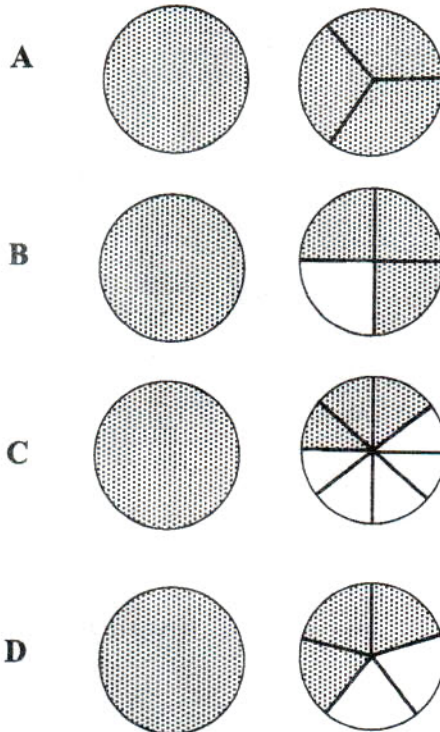
20/01/2012  
1. 625 053 rounded off to the nearest hundred is

- A. 600 000
- B. 625 000
- C. 625 050
- D. 625 100

20/01/2012  
2. The value of the underlined digit in 60 142 is

- A. 0
- B. 60
- C. 600
- D. 6 000

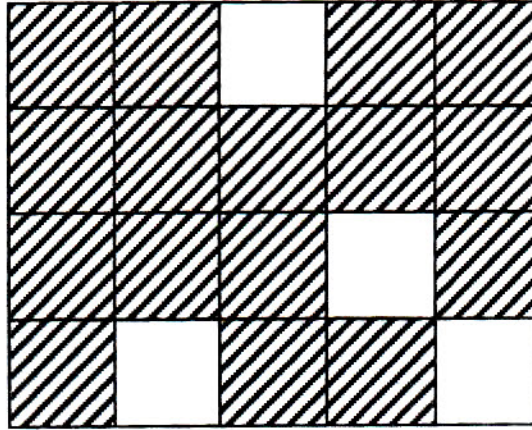
3. The diagram which shows  $1\frac{3}{4}$  is



4. The value of ten \$1 000 and six \$500 banknotes is

- A. \$3 000
- B. \$10 000
- C. \$13 000
- D. \$15 000

5.



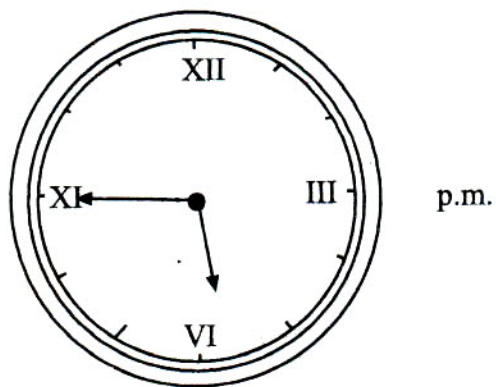
The unshaded rectangles expressed as a percentage of the whole is

- A. 10
- B. 20
- C. 30
- D. 40

6.  $345 - 430 + 264 =$

- A. 179.
- B. 239.
- C. 349.
- D. 359.

7.



The time shown on the clock face is

- A. 5.45 a.m.
- B. 6.45 a.m.
- C. 5.45 p.m.
- D. 6.45 p.m.

8. 37,5% expressed as a proper fraction is

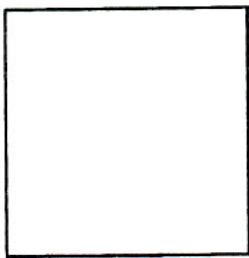
A.  $\frac{3}{8}$

B.  $\frac{3}{4}$

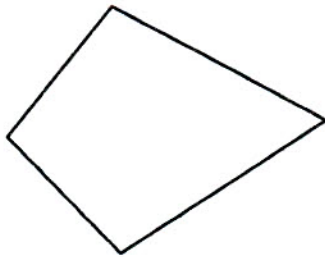
C.  $\frac{19}{50}$

D.  $37\frac{1}{2}$

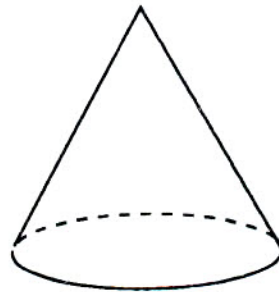
9. Which among these shapes is three dimensional?



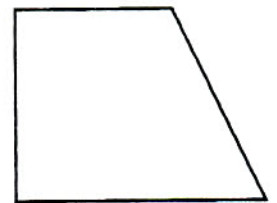
A



B



C



D

10. If the divisor is 8 and the dividend is 2, then the quotient is

A. 0.25

B. 2,5

C. 4

D. 16

11. The difference between one revolution and three right angles is

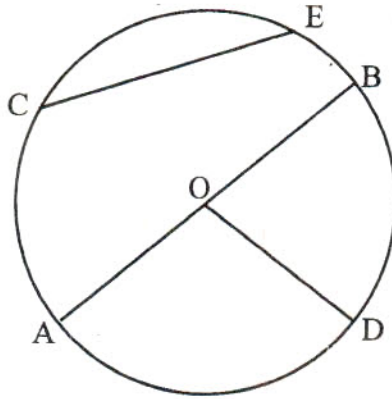
A.  $45^\circ$

B.  $90^\circ$

C.  $180^\circ$

D.  $270^\circ$

12.



The straight line marked CE is a

- A. diameter.  
 B. radius.  
 C. circumference.  
 D. chord.
13.  $12 \times 17 =$
- A.  $(10 \times 2) + (10 \times 7)$   
 B.  $(12 \times 10) + (12 \times 7)$   
 C.  $(10 \times 10) + (2 \times 7)$   
 D.  $(2 \times 17) + (10 \times 7)$
14. If Godfrey wanted to measure the height of the flag pole at his school, then the best unit to use is the
- A. mm  
 B. cm  
 C. m  
 D. km
15. A choir has 32 girls and 18 boys. Half the choir is
- A. 9  
 B. 16  
 C. 20  
 D. 25
16.  $0,7 \times 6,3 =$
- A. 4,41  
 B. 7,00  
 C. 9,00  
 D. 441,00

17.  $1000 - \frac{2}{5}$  of 250 =

- A. 100  
 B. 150  
 C. 500  
 D. 900

18. A motorist took 5 hours to travel a distance of 450 km.

His average speed was

- A. 60 km/h.  
 B. 70 km/h.  
 C. 80 km/h.  
 D. 90 km/h.

19.  $4\frac{1}{2} + 3\frac{1}{4} - 4\frac{1}{3} =$

- A.  $1\frac{7}{12}$ .  
 B.  $2\frac{1}{2}$ .  
 C.  $3\frac{5}{12}$ .  
 D.  $3\frac{1}{6}$ .

20.

Sun	1	8	15	22	29
Mon	2	9	16	23	
Tue	3	10	17	24	
Wed	4	11	18	25	
Thur	5	12	19	26	
Fri	6	13	20	27	
Sat	7	14	21	28	

The full calendar month shown is February

- A. 1994.  
 B. 1998.  
 C. 2002.  
 D. 2004.

37. Amanda put a stone in a jar with  $300 \text{ cm}^3$  of water and the water level rose to  $450 \text{ cm}^3$ . The volume of the stone was
- A.  $50 \text{ cm}^3$ .  
 B.  $150 \text{ cm}^3$ .  
 C.  $250 \text{ cm}^3$ .  
 D.  $750 \text{ cm}^3$ .
38. The average age of Tsitsi, Tambudzai and Netsai is 12. If Tsitsi and Tambudzai are aged 16 and 9 respectively, then Netsai's age is
- A. 17.  
 B. 19.  
 C. 21.  
 D. 26.
39. Mrs Moyo bought vegetables for \$9 250 and sold them for \$12 640. The profit she made is
- A. \$3 310.  
 B. \$3 390.  
 C. \$3 410.  
 D. \$3 890.
40. John's home is 600 m due east of the school. Jane's home is 720 m due east of the school too. The distance between their homes is
- A. 120 m.  
 B. 220 m.  
 C. 1 220 m.  
 D. 1 320 m.
41. On the last day of the school term there were 479 boys and 515 girls present. If 42 boys and 35 girls were absent, then the school's total enrolment was
- A. 917.  
 B. 994.  
 C. 1 051.  
 D. 1 071.

21. A class has 40 pupils and 24 of them are boys. The percentage of girls in the class is

- A. 16.
- B. 24.
- C. 40.
- D. 60.

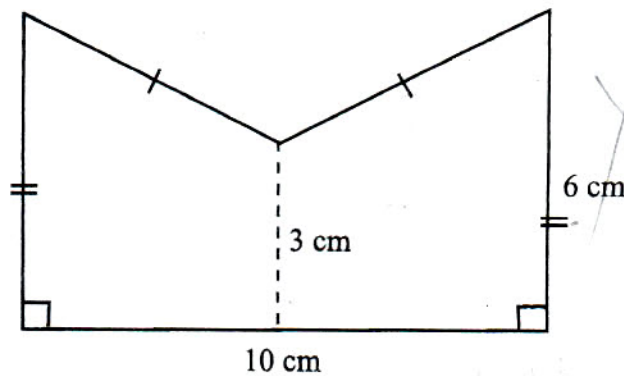
22.  $2,1 \div 0,03 =$

- A. 0.07.
- B. 0,7.
- C. 7,0.
- D. 70,0.

23. A tank holds one cubic metre of water when full. When it is 80% full it holds

- A. 20 l.
- B. 80 l.
- C. 200 l.
- D. 800 l.

24.



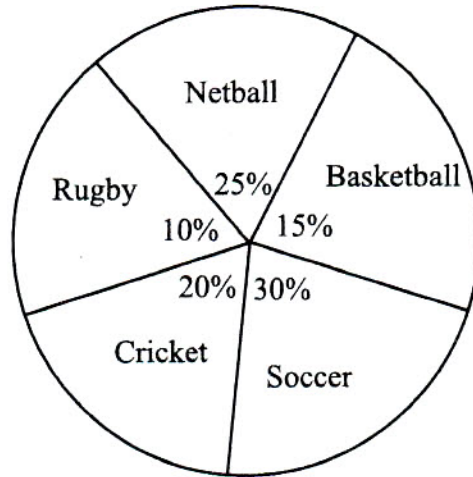
The area of the above shape is

- A.  $30 \text{ cm}^2$ .
- B.  $45 \text{ cm}^2$ .
- C.  $51 \text{ cm}^2$ .
- D.  $60 \text{ cm}^2$ .

25.  $\frac{4}{7}$  of 56 ares is

- A.  $32 \text{ m}^2$ .
- B.  $320 \text{ m}^2$ .
- C.  $3\ 200 \text{ m}^2$ .
- D.  $32\ 000 \text{ m}^2$ .

26.



The pie-chart shows sports played by pupils in a class. The least popular sport in this class as a fraction is

A.  $\frac{1}{10}$

B.  $\frac{3}{20}$

C.  $\frac{1}{5}$

D.  $\frac{1}{4}$

27.  $7^2 + 7 \times 2 =$

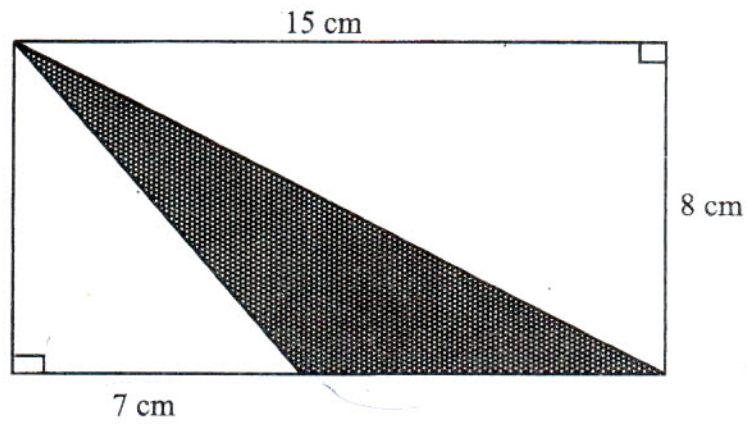
A. 21

B. 28

C. 63

D. 86

28.



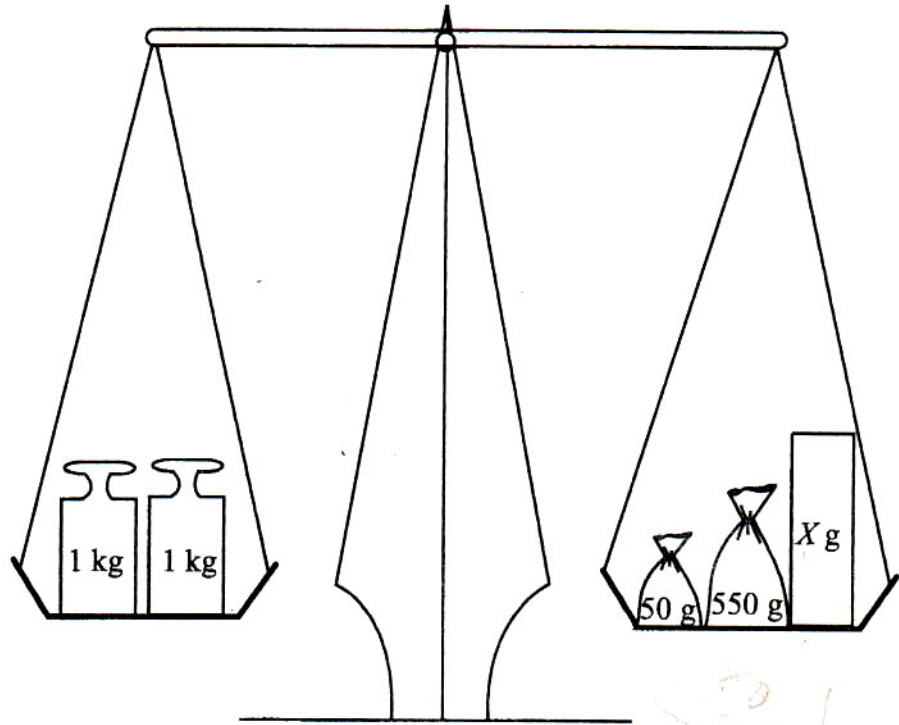
The area of the shaded part is

- A.  $28 \text{ cm}^2$ .  
 B.  $32 \text{ cm}^2$ .  
 C.  $60 \text{ cm}^2$ .  
 D.  $64 \text{ cm}^2$ .
29. David and Peter shared 98 oranges. David got 6 times as much as Peter. David's share was
- A. 14.  
 B. 16.  
 C. 49.  
 D. 84.
30. Six children shared  $1\frac{1}{2}$  loaves of bread equally. What fraction of a loaf did each one get?
- A.  $\frac{1}{8}$   
 B.  $\frac{1}{6}$   
 C.  $\frac{1}{4}$   
 D.  $\frac{1}{3}$

31. A school term ends on 12 December and the following term starts on 19 January of the following year. The number of days for the school holidays is
- A. 35  
 B. 36  
 C. 37  
 D. 38
32. The perimeter of a square with an area of  $36 \text{ m}^2$  is
- A. 6 m.  
 B. 9 m.  
 C. 24 m.  
 D. 36 m.
33. A farmer bought 50 chicks at \$200 each. 10 of them died. The profit made after selling the remaining ones at \$400 each was
- A. \$2 000.  
 B. \$6 000.  
 C. \$8 000.  
 D. \$10 000.
34. If the fractions  $\frac{2}{5}; \frac{1}{2}; \frac{3}{4}; \frac{3}{10}$  are arranged in ascending order, the result is
- A.  $\frac{1}{2}; \frac{3}{4}; \frac{2}{5}; \frac{3}{10}$   
 B.  $\frac{3}{10}; \frac{2}{5}; \frac{1}{2}; \frac{3}{4}$   
 C.  $\frac{2}{5}; \frac{1}{2}; \frac{3}{4}; \frac{3}{10}$   
 D.  $\frac{3}{4}; \frac{2}{5}; \frac{1}{2}; \frac{3}{10}$
35. If the price of a suit was increased by  $12\frac{1}{2}\%$  from \$127 000, then the new price is
- A. \$15 875  
 B. \$31 750  
 C. \$142 875  
 D. \$158 750
36. A bucket full of peas weighs 15 kg and the peas alone weigh 14 kg. The gross mass of the bucket when it is half full is
- A. 7,5 kg  
 B. 8 kg  
 C. 14,5 kg  
 D. 29 kg

37. Amanda put a stone in a jar with  $300 \text{ cm}^3$  of water and the water level rose to  $450 \text{ cm}^3$ . The volume of the stone was
- A.  $50 \text{ cm}^3$ .
  - B.  $150 \text{ cm}^3$ .
  - C.  $250 \text{ cm}^3$ .
  - D.  $750 \text{ cm}^3$ .
38. The average age of Tsitsi, Tambudzai and Netsai is 12. If Tsitsi and Tambudzai are aged 10 and 9 respectively, then Netsai's age is
- A. 17.
  - B. 19.
  - C. 21.
  - D. 26.
39. Mrs Moyo bought vegetables for \$9 250 and sold them for \$12 640. The profit she made is
- A. \$3 310.
  - B. \$3 390.
  - C. \$3 410.
  - D. \$3 890.
40. John's home is 600 m due east of the school. Jane's home is 720 m due east of the school too. The distance between their homes is
- A. 120 m.
  - B. 220 m.
  - C. 1 220 m.
  - D. 1 320 m.
41. On the last day of the school term there were 479 boys and 515 girls present. If 42 boys and 35 girls were absent, then the school's total enrolment was
- A. 917.
  - B. 994.
  - C. 1 051.
  - D. 1 071.

42.



The mass X on the balance scale is

- A. 550.  
 B. 1 400.  
 C. 1 550.  
 D. 2 550.
43. Mandisa banks her money with a Building society.  $\frac{2}{3}$  of the money is \$24 000. How much does she have in the bank?

- A. \$8 000  
 B. \$12 000  
 C. \$16 000  
 D. \$36 000

44.

5				Q		
4					S	
3		P				
2			R			
1						
	1	2	3	4	5	6

In the grid above, S is at

- A. (3 ; 4)  
 B. (4 ; 3)  
 C. (4 ; 5)  
 D. (5 ; 4)

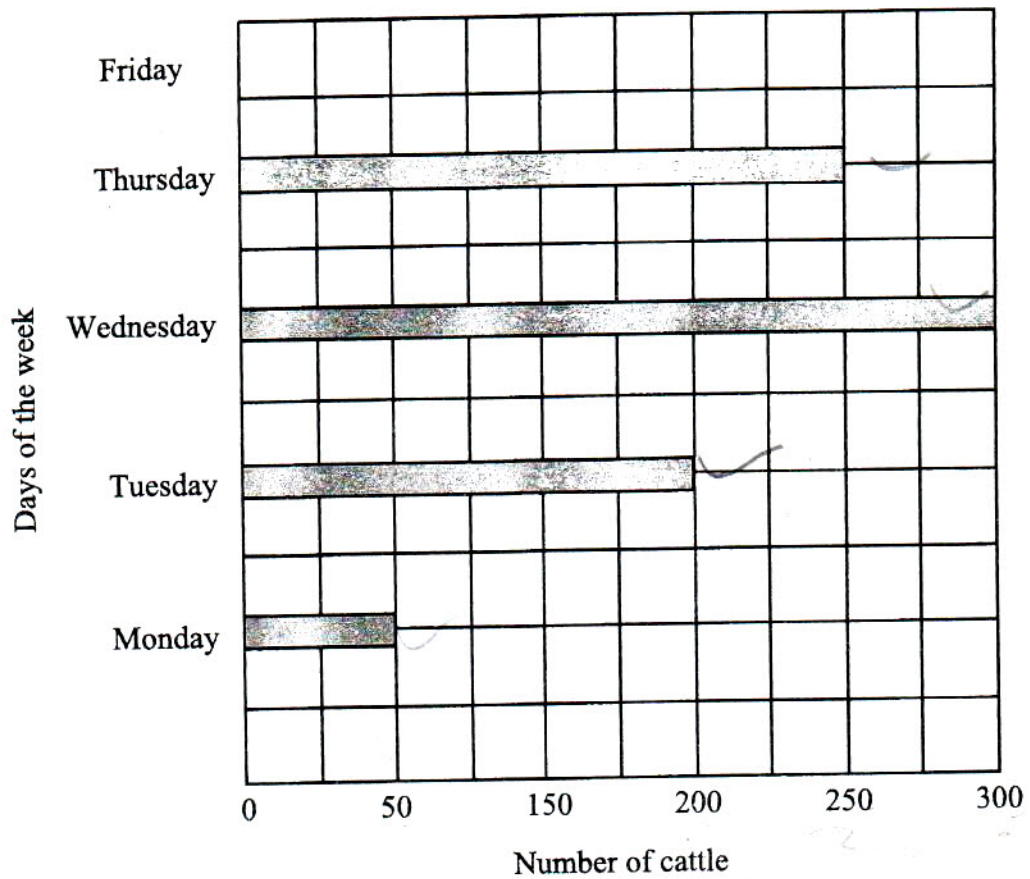
45.

Bindura			
583	Chiredzi		
229	519	Kadoma	
453	860	506	Kariba

The distance from Bindura to Chiredzi is less than the distance from Chiredzi to Kariba by

- A. 277 km.  
 B. 583 km.  
 C. 860 km.  
 D. 1 443 km.
46. A tank with a rectangular base of area  $14 \text{ m}^2$  holds 28 000 litres when full. The height of the tank is
- A. 2 m.  
 B. 20 m.  
 C. 200 m.  
 D. 2 000 m.
47. The smallest number that can be divided by the numbers 12; 16 and 20 without leaving a remainder is
- A. 120.  
 B. 240.  
 C. 360.  
 D. 480.
48. Justin and Dominic have a total mass of 82 kg, whereas Valentine and Dominic have a mass of 79 kg. If Justin's mass is 42 kg, then Valentine's mass is
- A. 35 kg.  
 B. 37 kg.  
 C. 39 kg.  
 D. 40 kg.

49. The graph below shows the number of cattle which were dipped during a particular week. Use it to answer questions 49 and 50.



The average number of cattle dipped during the week was

- A. 100.  
 B. 160.  
 C. 300.  
 D. 250.
- vakatache apa asit*
50. The total number of cattle that dipped on Wednesday and Thursday is more than the total that dipped on Monday and Tuesday by
- A. 150.  
 B. 200.  
 C. 300.  
 D. 400.



# ZIMBABWE SCHOOL EXAMINATIONS COUNCIL

GRADE SEVEN EXAMINATION, 2009.

**MATHEMATICS**  
**PAPER 2**

**002/2**

**OCTOBER 2009 SESSION**

**Time: 2 hours**

## INSTRUCTIONS TO CANDIDATES

1. Answer **all** questions in Section **A**.
2. Answer **three** questions in Section **B**.
3. Section **A** carries 25 marks.
4. Section **B** carries 15 marks.
5. To obtain full marks for any question, **all working** must be shown.
6. Do **not** measure from given diagrams.
7. Electronic calculators and slide rules **must not** be used in the examination.
8. **Underline** answers and rule off after each answer.

**This question paper consists of 5 printed pages and 3 blank pages.**

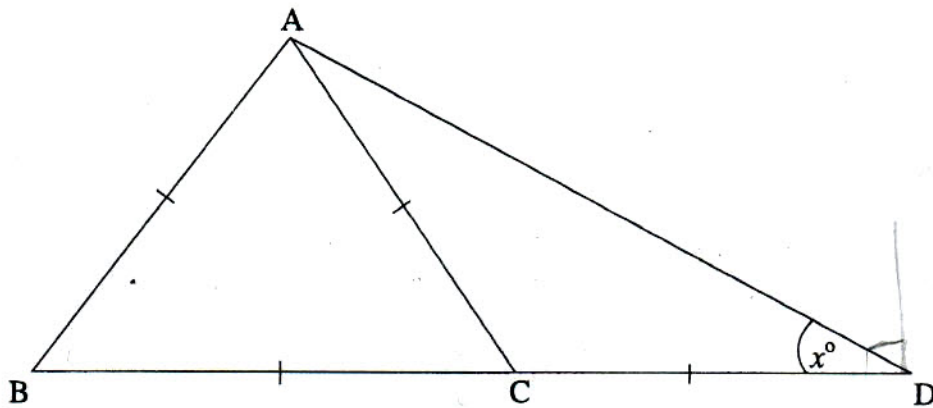
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## Section A (25 marks)

Answer *all* questions in this section.

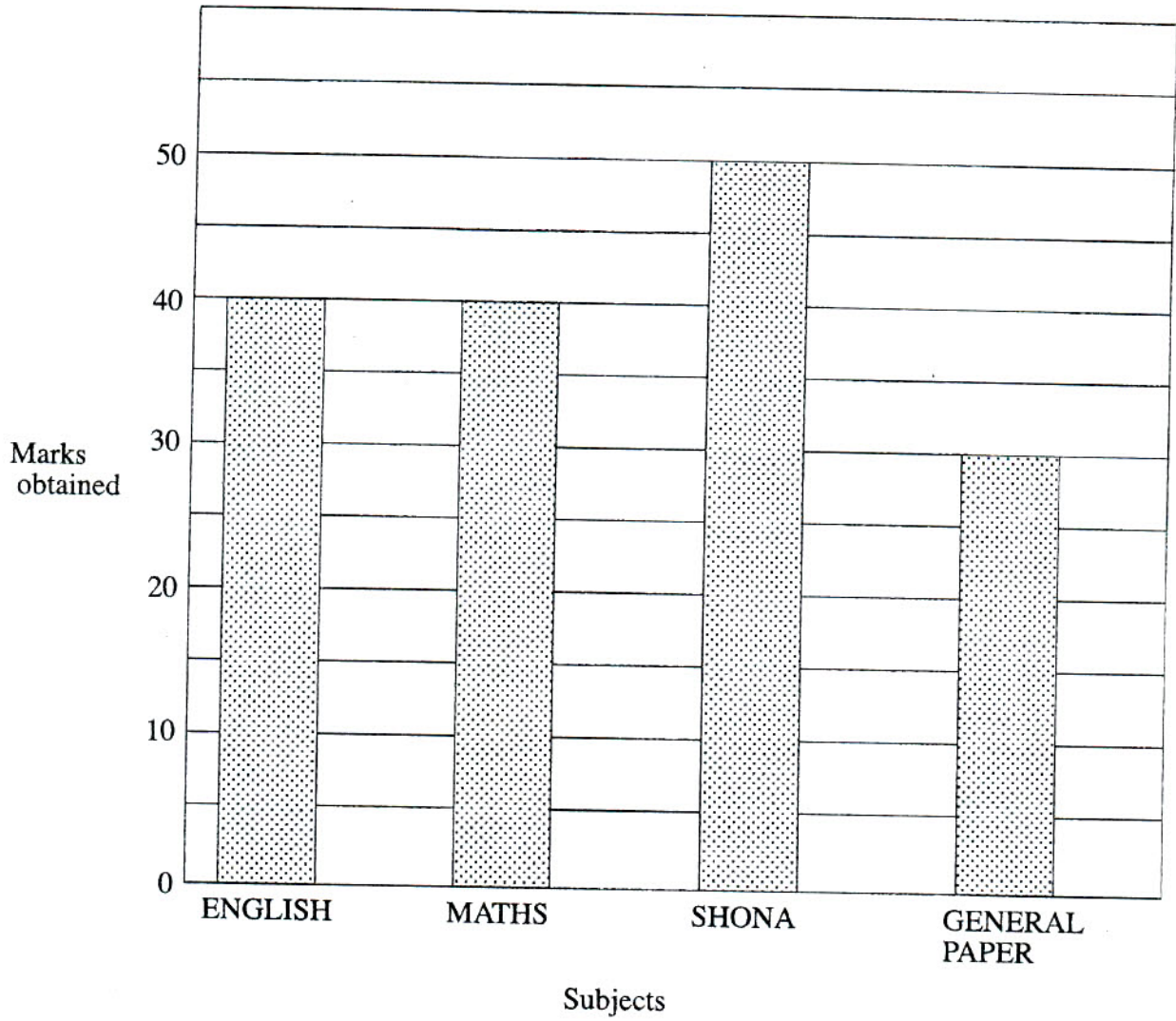
- 1 Find the product of 0,07 and 9. [2]
- 2 Find, in minutes,  $\frac{5}{6}$  of  $1\frac{1}{2}$  hours. [2]
- 3 (a) Simplify  $3 + \frac{4}{10} + \frac{9}{100}$  as a decimal. [3]
- (b) Express 24 as a product of its prime factors. [2]
- 4 The perimeter of a square field is 160 m. Find its area. [3]

5



Triangle ABC is equilateral and triangle ACD is isosceles. Find the value of  $x$ . [3]

- 6 Mrs Dombo invested \$40 000 for 6 months at  $7\frac{1}{2}\%$  per annum. Calculate the interest she earned. [3]
- 7 A pedestrian travelled a distance of 6 km walking at an average speed of 8 km/h. Calculate, in minutes, the time taken for the journey. [3]



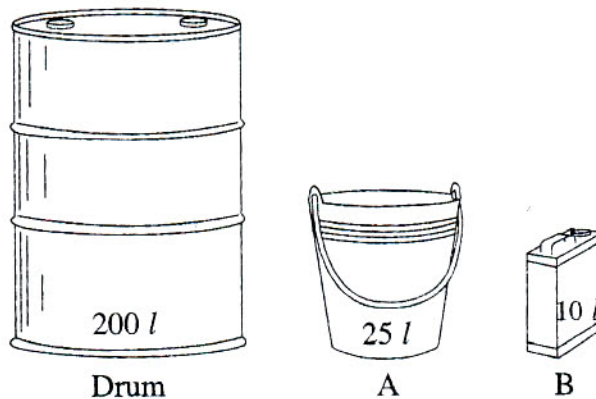
The graph above shows marks obtained by Thabani in four subjects.

- (a) In which subject did Thabani perform best? [1]
- (b) Calculate his average mark. [3]

## Section B

- 9 At Mr Lolo's farm there are 200 sheep. 0,4 of them belong to the father, 0,25 to the eldest son and 0,05 to the eldest daughter. The remaining sheep belong to the mother.
- (a) Find the number of sheep which belong to the eldest daughter. [2]
- (b) Express the mother's sheep as a percentage. [3]
- 10 A fully loaded lorry weighs 16 200 tonnes. The empty lorry weighs  $\frac{1}{4}$  of the gross mass.
- (a) Find the mass of the empty lorry. [2]
- (b) If the lorry is loaded with 50 kg bags of mealie-meal, calculate the number of bags in the lorry. [3]
- 11 A farmer sold 45% of his pigs to Colcom and 20% to a local butcher. He had 700 pigs left. Calculate:
- (a) the number of pigs he had at first [3]
- (b) the number of pigs sold to Colcom [2]

12



The diagram shows a drum containing 200l of paint and containers A and B with capacities 25l and 10l respectively.

- (a) If container A was filled with paint 6 times, find the number of times container B would be filled with the remaining paint in order to empty the drum. [4]
- (b) Write down the ratio of total volume emptied by container B to total emptied by container A in simplest form. [1]

- 13** In a forestry plantation 65 rows of trees were planted. Each row had 128 trees.
- (a) Calculate the total number of trees in the plantation. [2]
- (b) If 832 trees were destroyed by a veld fire, express the number of trees destroyed as a percentage of the whole plantation. [3]



**ZIMBABWE SCHOOL EXAMINATIONS COUNCIL**  
**GRADE SEVEN EXAMINATION**

**MATHEMATICS**  
**PAPER 1**

**002/1**

**OCTOBER 2010 SESSION**

Time: 2 hours

**INSTRUCTIONS TO CANDIDATES**

1. Read **all** the instructions carefully.
2. **Do not** open this booklet until you are told to do so by the invigilator.
3. Use only an HB pencil for all entries on the answer sheet.
4. When you are told to start, choose **one** correct answer from the suggested answers and shade it **very dark** as shown in the examples at the top of the answer sheet.
5. If you wish to change your answer, **erase it completely** with a pencil rubber and then shade the new choice.
6. If **more than one** box is shaded for any one answer, that answer will be regarded as **wrong**.
7. **If you do not understand** the instructions, **ask** the invigilator to explain them to you **before you start**.
8. Answer **all** the questions on the separate answer sheet provided.
9. Rough paper will be provided.

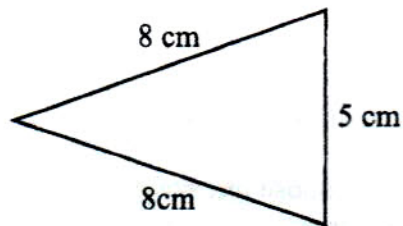
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**This question paper consists of 11 printed pages and 1 blank page.**

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- 1 Sixty thousand and eight in figures is
- A 6 008.
  - B 6 080.
  - C 60 008.
  - D 60 080.
- 2 The value of the underlined digit in the number 524,187 is
- A 8 hundredths.
  - B 8 tenths.
  - C 8 tens.
  - D 8 hundreds.
- 3 Round off 8,74 to the nearest whole number
- A 8
  - B 9
  - C 900
  - D 870

4



The name of the shape above is

- A an isosceles triangle.
  - B an equilateral triangle.
  - C a scalene triangle.
  - D a right-angled triangle.
- 5 4,005kg in grammes is
- A 400,5.
  - B 4005.
  - C 40,05.
  - D 4,005.
- 6 10.00 a.m in 24 hour notation is
- A 1000.
  - B 1200.
  - C 2000.
  - D 2200.

7  $\frac{6}{8}$  in its lowest terms is

- A  $\frac{12}{16}$ .
- B  $\frac{2}{3}$ .
- C  $\frac{3}{4}$ .
- D  $\frac{4}{5}$ .

8  $2\frac{5}{12} + 3\frac{2}{3} =$

- A  $5\frac{7}{15}$
- B  $6\frac{1}{12}$
- C  $6\frac{5}{12}$
- D  $6\frac{2}{3}$

9  $11,53 + 0,6$  correct to one decimal place is

- A 12,1.
- B 12,0.
- C 12,13.
- D 12,2.

10 What is 2 005 cents in dollars?

- A \$200,50
- B \$20,50
- C \$20,05
- D \$2,05

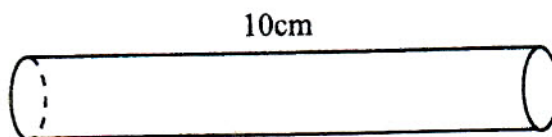
11 \$4,50 as a fraction of \$7,50 in its lowest terms is

- A  $\frac{3}{4}$ .
- B  $\frac{3}{5}$ .
- C  $1\frac{2}{3}$ .
- D  $\frac{45}{75}$ .

- 12 A shirt is marked \$20. If 5% discount is offered for cash, what is the discount?

A \$19  
 B \$15  
 C \$4  
 D \$1

13



The diagram above shows a tube 10 cm long which is open at both ends. It has a circumference of 8cm. What is the outside area of the tube?

A  $18\text{cm}^2$   
 B  $90\text{cm}^2$   
 C  $80\text{cm}^2$   
 D  $108\text{cm}^2$

- 14 Kundai walks 150m in 140 steps. How far will she walk in 70 steps?

A 65m  
 B 75m  
 C 300m  
 D 80m

- 15  $\frac{1}{3}$  of 1 hour 15 minutes is

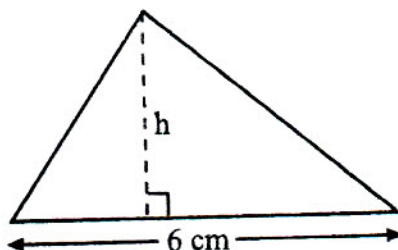
A 35 minutes.  
 B 75 minutes.  
 C 45 minutes.  
 D 25 minutes.

- 16  $\frac{6}{9} \times 2\frac{1}{4} =$

A  $\frac{1}{6}$   
 B  $\frac{1}{3}$   
 C  $1\frac{1}{2}$   
 D  $2\frac{1}{6}$

- 17  $\frac{4}{6}$  of a day is
- A 36 hours.
  - B 8 hours.
  - C 12 hours.
  - D 16 hours.
- 18 The cost of 9m of cloth at \$42,00 per metre is
- A \$51.
  - B \$4,70.
  - C \$368,00.
  - D \$378,00.
- 19  $0,83 + 3,71 + 47,9 =$
- A 9,33
  - B 524,4
  - C 52,44
  - D 5244
- 20  $1\ 111 - 505 =$
- A 909
  - B 1616
  - C 504
  - D 606
- 21 What distance does a lorry travelling at 80km/hr cover in 4 hours?
- A 76km
  - B 20km
  - C 84km
  - D 320km
- 22 By how much is 276 greater than 195?
- A 81
  - B 91
  - C 121
  - D 471

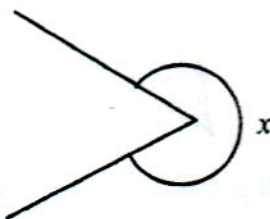
23



The area of the triangle above is  $12\text{cm}^2$  and the base is  $6\text{cm}$ . The height of the triangle is

- A 3cm.
- B 4cm.
- C 6cm.
- D 2cm.

24



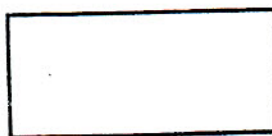
What name is given to the angle marked  $x$ ?

- A obtuse angle
- B acute angle
- C reflex angle
- D right angle

25  $4^3 =$ 

- A 64
- B 43
- C 12
- D 81

26



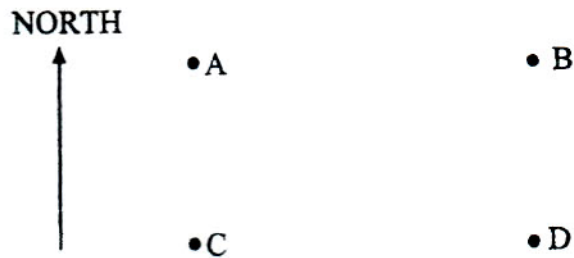
How many lines of symmetry does the shape above have?

- A 12
- B 4
- C 2
- D 1

27 When a tank is 25% full, it contains 40 litres of water. The capacity of the tank is

- A 65 litres.
- B 160 litres.
- C 150 litres.
- D 10 litres.

28



In the diagram above, the direction of D from A is

- A North East.
- B North West.
- C South East.
- D South West.

29 The product of 379 and 39 is 14 781. What is the product of 37,9 and 3,9?

- A 147,81
- B 14,781
- C 1,4781
- D 1478,1

30  $7\frac{1}{3} - 3\frac{3}{4} =$

- A  $\frac{7}{12}$
- B  $3\frac{5}{12}$
- C  $3\frac{7}{12}$
- D  $4\frac{7}{12}$

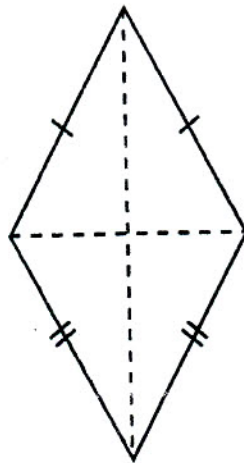
31 The number of hours and minutes from 4.25 a.m to 11.15 a.m on the same day is

- A 15hours 40minutes
- B 6hours 50minutes
- C 6hours 40minutes
- D 7hours 50minutes

- 32 Kundai bought a television set for \$3 000. She later sold it making a profit of 20%. How much did she sell the television set for?
- A \$600  
B \$2 400  
C \$3 020  
D \$3 600
- 33 What is the change from \$10,00 after buying 2 small cakes at \$4,35 each?
- A \$8,70  
B \$5,65  
C \$2,30  
D \$1,30
- 34 Takudzwa had \$65,00 in his bank account. He made a withdrawal of \$25,00 on one day and then a deposit of \$10,00 on another day. What was his new balance?
- A \$50,00  
B \$100,00  
C \$90,00  
D \$75,00
- 35 The net mass of jam is 750g. If the empty tin has a mass of 95g, then the gross mass is
- A 655g.  
B 745g.  
C 845g.  
D 855g.
- 36  $0,2 \times 0,2 \times 0,2 =$
- A 0,8  
B 0,6  
C 0,006  
D 0,008
- 37  $\frac{3}{4} + \frac{4}{15} + \frac{13}{20} =$
- A  $\frac{1}{3}$   
B  $\frac{11}{12}$   
C  $\frac{20}{39}$   
D  $1\frac{2}{3}$

- 38 A car crosses a bridge 1000m long in one minute. Its average speed in km/hr is
- A 100.  
 B  $\frac{1}{60}$ .  
 C 16,6.  
 D 60.
- 39 A lorry can carry a load of 5 tonnes. How many bags of cement each weighing 50kg can it carry?
- A 250  
 B 100  
 C 10  
 D 45
- 40 A piece of string  $3\frac{1}{2}$  metres long was cut into 5 equal pieces. How long was each piece?
- A 17,5cm  
 B 70cm  
 C 0,7cm  
 D 7m
- 41 Mrs Nyama's rectangular garden is 150m long and 120m wide. What is the area of the garden in hectares?
- A 1800ha  
 B 180ha  
 C 18ha  
 D 1,8ha

42



The shape above is a

- A kite.  
 B rhombus.  
 C trapezium.  
 D parallelogram.

[Turn over

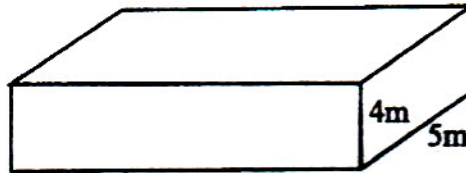
43 The change from a ten dollar note after buying a dozen bananas at 50c each is

- A \$9,50.
- B \$4,00.
- C \$5,00.
- D \$6,00.

44 John received 4 sweets and Taurai received 2 sweets more than John. Express Taurai's share as a fraction of the total sweets shared.

- A  $\frac{1}{5}$
- B  $\frac{2}{5}$
- C  $\frac{1}{3}$
- D  $\frac{3}{5}$

45



A rectangular tank above has a volume of  $160\text{m}^3$ . It is 5m wide and 4m deep. Its length is

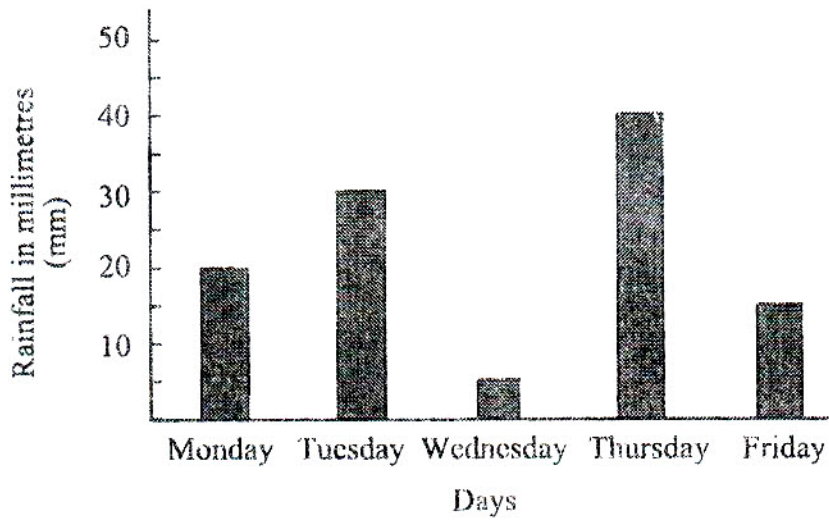
- A 8m.
- B 40m.
- C 20m.
- D 32m.

46  $4 \times (3 + 2) =$

- A 9
- B 11
- C 14
- D 20

47 The cost of 8 sweets is \$4,80. If Tawanda buys 10 such sweets, the change he gets from \$10,00 is

- A \$0,60.
- B \$0,48.
- C \$4,00.
- D \$6,00.



The graph above shows the rainfall for five days of the week. Use it to answer questions 48 and 49.

48 Find the difference between the highest and lowest rainfall.

- A 35mm
- B 50mm
- C 45mm
- D 5mm

49 What was the total rainfall for the five days?

- A 150mm
- B 110mm
- C 115mm
- D 120mm

50

Beitbridge			
322	Bulawayo		
607	299	Kadoma	
472	164	135	Gweru

The chart above shows the distances between selected towns in Zimbabwe. The distance from Beitbridge to Gweru is

- A 472km.
- B 322km.
- C 135km.
- D 164km.



**ZIMBABWE SCHOOL EXAMINATIONS COUNCIL**  
**GRADE SEVEN EXAMINATION**

**MATHEMATICS**  
**PAPER 2**

**002/2**

**OCTOBER 2010 SESSION**

**Time: 2 hours**

**INSTRUCTIONS TO CANDIDATES**

1. Answer **all** questions in Section **A**.
2. Answer **three** questions in Section **B**.
3. Section **A** carries 25 marks.
4. Section **B** carries 15 marks.
5. To obtain full marks for any question, **all working** must be shown.
6. Do **not** measure from given diagrams.
7. Electronic calculators and slide rules **must not** be used in the examination.
8. **Underline** answers and rule off after each answer.

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**Section A (25 marks)**

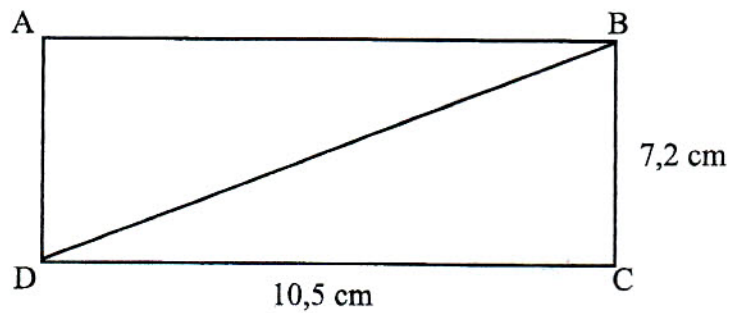
Answer **all** questions in this section.

1 (a) Write 25 007 in words. [1]

(b) Express  $\frac{1}{4}$  as a decimal. [1]

2 Change 3,105 litres to millilitres. [1]

3 The figure below is a rectangle which measures 10,5cm by 7,2cm.



(a) Write down the name of line BD. [1]

(b) Calculate the perimeter of the rectangle. [2]

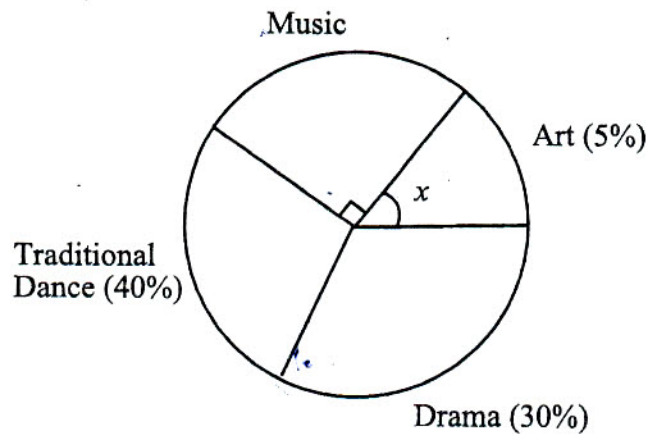
4 Find the difference between  $2\frac{1}{4}$  and  $1\frac{2}{3}$ . [2]

5 (a) Simplify  $200,95 - 9,189$ . [1]

(b) Find the value of  $4,8 \div 0,006$ . [2]

6 Simplify  $\frac{2}{5} - \frac{1}{4} + \frac{3}{8}$ . [3]

- 7 The Pie Chart below shows the percentage of pupils in different clubs at Masoro Primary School.

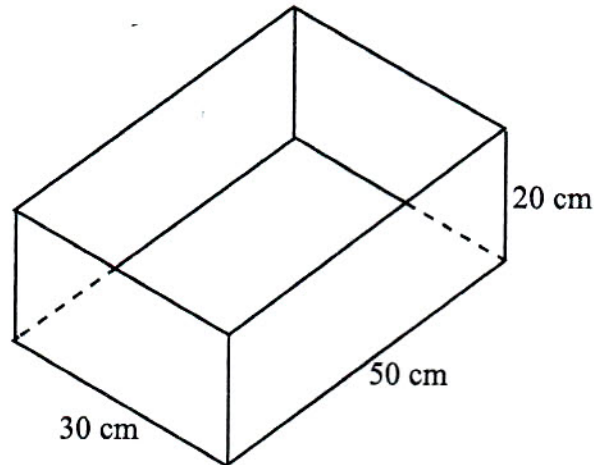


- (a) Calculate the angle  $x$ . [2]
- (b) Find the percentage of pupils in the Music club. [2]
- (c) The total number of pupils at the school is 860. Calculate the number of pupils in the Drama Club. [2]
- 8 Jabulani can read a book in 7 days and Rudo can read the same book in 9 days.
- (a) Express the time taken by Rudo to Jabulani's as a ratio. [1]
- (b) If Mercy takes half the sum of Jabulani and Rudo's time to read the same book;
- (i) find the number of days Mercy takes to read the book, [2]
- (ii) calculate the average time taken by the three pupils to read the book. [2]

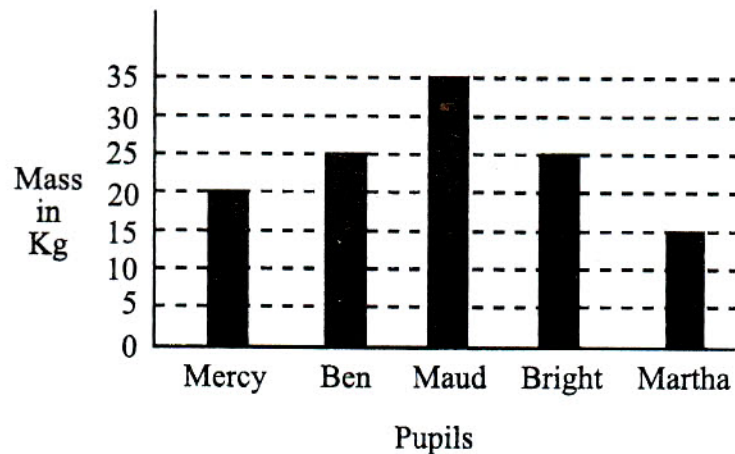
**Section B** (15 marks).

Answer any *three* questions in this section.

- 9 The diagram below shows a rectangular container measuring 50cm by 30cm by 20cm.



- (a) Calculate the volume of the container. [2]
- (b) Express the volume of the container in litres. [1]
- (c) Find the number of 5-litre tins of water that can be used to fill the container. [2]
- 10 The bar chart shows the masses in kg of different pupils in a class.



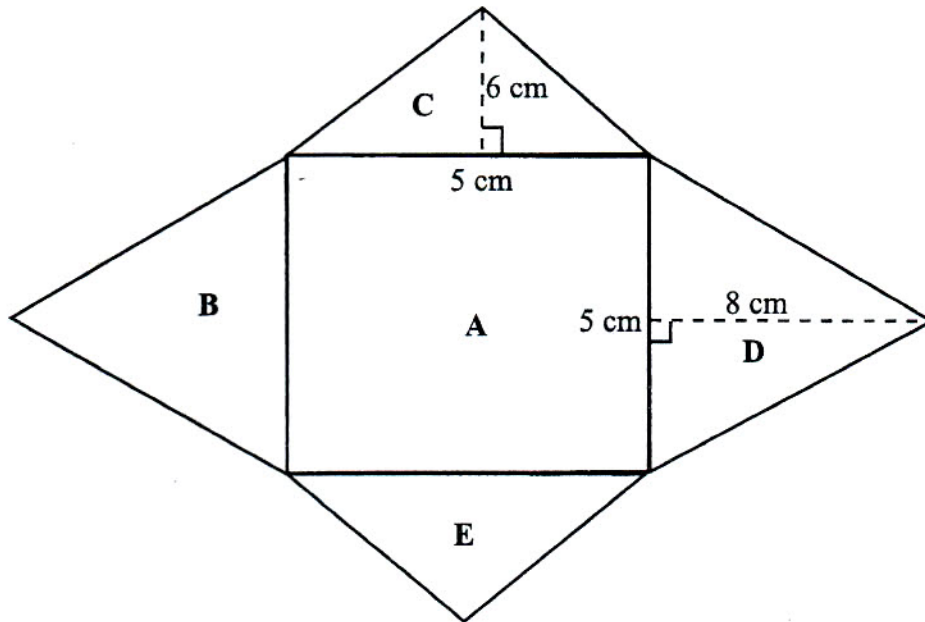
- (a) Name the heaviest pupil. [1]
- (b) Find the difference in mass between Bright and Mercy. [2]
- (c) Calculate the average mass of the pupils. [2]

- 11 Study the time table of a bus that travelled between Harare and Bulawayo.

Town/City	Departure	Arrival
Harare	0645	_____
Chegutu	0830	0815
Kadoma	0910	0900
Gweru	1125	1110
Bulawayo	_____	1255

- (a) Express the departure time from Harare in 12-hour notation. [1]
- (b) For how long did the bus stop in Gweru? [1]
- (c) Find the average speed of the bus excluding stopping time, if the distance between Harare and Bulawayo is 440km. [3]
- 12 In 2002, Chipu worked in a bookshop and earned a salary of \$40 000,00 per month plus a commission of  $12\frac{1}{2}\%$  on basic salary for selling 20 extra books.
- (a) Calculate the commission she earned for selling 20 extra books. [2]
- (b) Find the total amount she earned per month when she sold 20 extra books. [1]
- (c) Find the simple interest Chipu earned when she invested \$40 000,00 for 4 years at 5% per annum. [2]

- 13 The figure below is made up of a square A of side 5 cm and triangles B, C, D and E on its sides.



Triangle B and D are equal and triangles C and E are also equal.

- (a) State the number of lines of symmetry for the whole figure. [1]
- (b) Find the area of triangle D. [1]
- (c) Calculate the area of the whole figure. [3]



**ZIMBABWE SCHOOL EXAMINATIONS COUNCIL**  
**GRADE SEVEN EXAMINATION**

**MATHEMATICS**  
**PAPER 1**

**002/1**

**OCTOBER 2011 SESSION**

Time: 2 hours

**INSTRUCTIONS TO CANDIDATES**

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5. If you wish to change your answer, **erase it completely** with a pencil rubber and then shade the new choice.
6. If **more** than **one** box is shaded for any one answer, that answer will be regarded as **wrong**.
7. **If you do not understand** the instructions, **ask** the invigilator to explain them to you **before you start**.
8. Answer **all** the questions on the separate answer sheet provided.
9. **Rough paper will be provided.**

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**This question paper consists of 13 printed pages and 3 blank pages.**

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20/01/2012

1. Eight thousand nine hundred and seven in figures is

- A. 897.
- B. 8 970.
- C. 8 097.
- D. 8 907.

2. 2 960 to the nearest 100 is

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- A. 2 900.
- B. 3 000.
- C. 2 000.
- D. 2 960.

3.  $\frac{18}{12}$  as a mixed number is

- A.  $\frac{2}{3}$ .
- B.  $1\frac{2}{3}$ .
- C.  $1\frac{1}{2}$ .
- D.  $\frac{12}{18}$ .

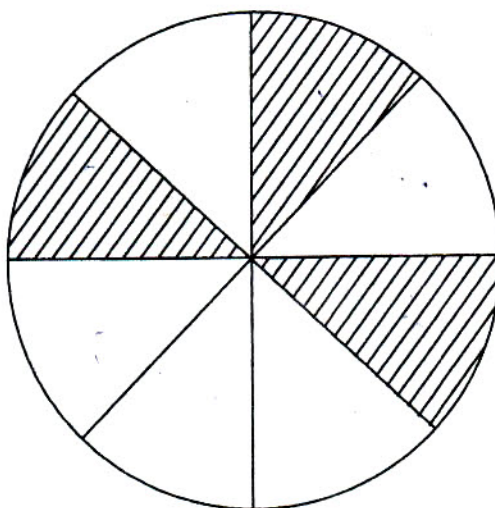
4.  $\frac{3}{4}$  as a decimal fraction is

- A. 9,34.
- B. 0,43.
- C. 0,25.
- D. 0,75.

5.  $54,62 + 3$  is

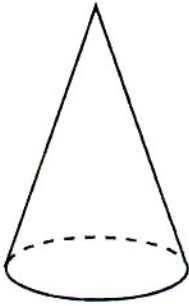
- A. 57,62.
- B. 54,65.
- C. 54,92.
- D. 84,62.

6. The circle is divided into 8 equal parts. What fraction of the circle is **not** shaded?

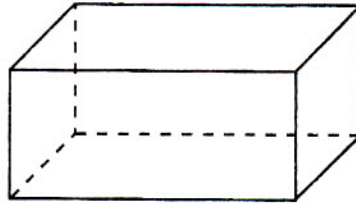


- A. 0,375.  
 B. 0,58.  
 C. 0,625.  
 D. 0,38.
7. Chipo's span is 16 cm. She measured the length of a room and found that it was 27 spans. What was the actual length of the room in metres?
- A. 4,32.  
 B. 43,2.  
 C. 4 320.  
 D. 432.
8. Maria got 143 marks and Leah got 99 marks. Their brother Zenzo got the difference of Maria and Leah's marks. What was the three pupils' average mark?
- A. 44.  
 B.  $95\frac{1}{3}$ .  
 C.  $96\frac{1}{2}$ .  
 D. 286.
9. The missing fraction in the pattern  $\frac{1}{2}; \frac{2}{3}; \frac{3}{4}; \square; \frac{5}{6}$  is
- A.  $\frac{4}{5}$ .  
 B.  $\frac{1}{5}$ .  
 C.  $\frac{3}{5}$ .  
 D.  $\frac{4}{6}$ .

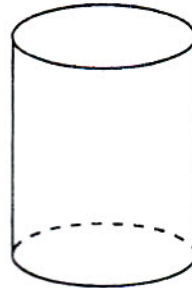
10.



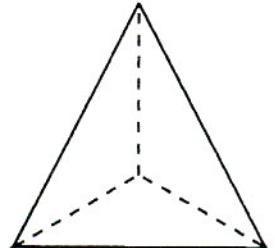
A



B



C

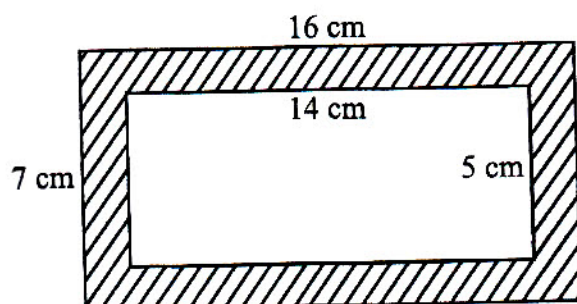


D

Which of the above shapes is a triangular pyramid?

11. A farmer had twenty five animals. Ten were cattle, seven were sheep and the rest were goats. The number of goats expressed as a percentage of the total number of animals was
- A. 28%.
  - B. 32%.
  - C. 40%.
  - D. 21%.
12. 750 grammes expressed in kilograms is
- A. 75.
  - B. 0,075.
  - C. 7,5.
  - D. 0,75.
13. 0925 is the same as
- A. 9.25 pm.
  - B. 25 minutes to 9.
  - C. 9.25 am.
  - D. 25 minutes to 10.
14. What is the value of 'a' in  $45 + a = 15 + 45$
- A. 60.
  - B. 105.
  - C. 15.
  - D. 45.
15. A motorist covered a distance of 40 km in 32 minutes. The average speed was
- A. 75 km/h.
  - B. 72 km/h.
  - C. 40 km/h.
  - D.  $21\frac{1}{3}$  km/h.

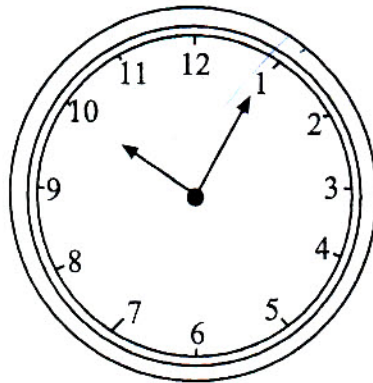
16.



The area of the shaded part in the diagram above is

- A.  $112 \text{ cm}^2$ .  
 B.  $42 \text{ cm}^2$ .  
 C.  $70 \text{ cm}^2$ .  
 D.  $182 \text{ cm}^2$ .
17. Gabriel, Thoko and Morgan shared \$7,50 in the ratio 2:3:5 respectively and Thoko gave her share to a blind man. How much was given to the blind man?
- A. \$3,25.  
 B. \$7,50.  
 C. \$1,50.  
 D. \$2,25.
18. Tom walked 100 m westwards from his home, turned South and walked another 100 m. In which direction should he move if he goes straight home?
- A. North East.  
 B. South.  
 C. East.  
 D. North West.
19.  $2\frac{1}{4} - \frac{4}{5} + \frac{5}{8} =$
- A.  $2\frac{10}{17}$ .  
 B.  $2\frac{3}{10}$ .  
 C.  $\frac{33}{40}$ .  
 D.  $2\frac{2}{7}$ .
20. A rectangular water tank measures 10 m by 7,5 m by 3 m. Its volume in  $\text{m}^3$  is
- A. 750.  
 B. 2 250.  
 C. 225.  
 D. 30.

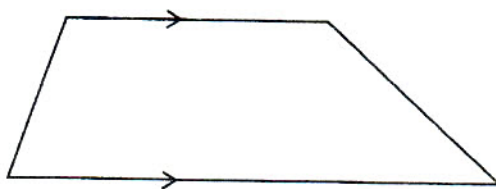
21. If  $\frac{3}{5}$  of a number is 30, then  $\frac{2}{5}$  of that number is
- A. 50.
  - B. 30.
  - C. 10.
  - D. 20.
22. When a car tank is 25% full, it contains 30 litres of petrol. The capacity of the full tank is
- A. 120 litres.
  - B.  $7\frac{1}{2}$  litres.
  - C. 55 litres.
  - D.  $37\frac{1}{2}$  litres.
23.  $201,50 \div 0,5$  is
- A. 100,75.
  - B. 4 030.
  - C. 40,3.
  - D. 403.
- 24.



The clock above is 35 minutes ahead. What is the correct time?

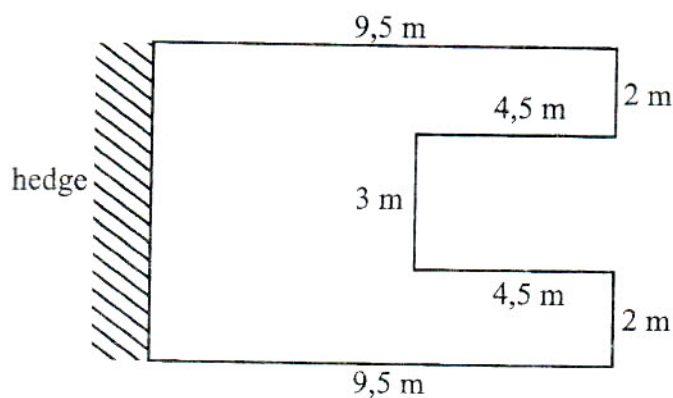
- A 1005.
- B 1040.
- C 0930.
- D 10.30.

25.



What is the name of the shape above?

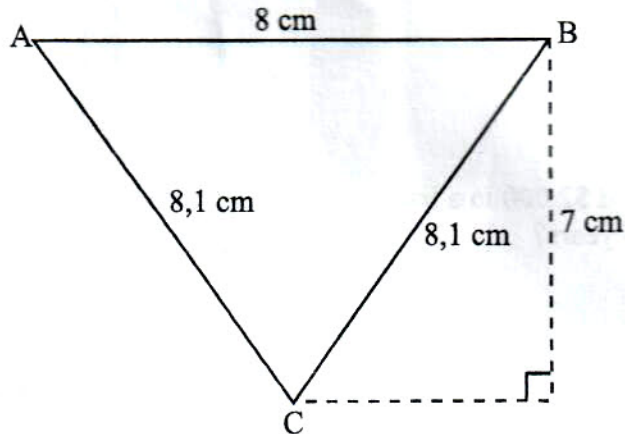
- A. Parallelogram.
  - B. Trapezium.
  - C. Rectangle.
  - D. Rhombus.
26. Mrs Ncube invested \$2 000 in a bank. The interest rate was 5% per annum. What would be her interest after 4 years?
- A. \$400.
  - B. \$300.
  - C. \$500.
  - D. \$1 600.
27. Mr Moyo wants to fence his garden shown below. If the hedge is excluded, what is the total length of wire needed?



- A. 42 m.
  - B. 35 m.
  - C. 66,5 m.
  - D. 20,6 m.
28. The difference between  $7 \times 5 - 2$  and  $7 \times (5 - 2)$  is
- A. 0.
  - B. 35.
  - C. 21.
  - D. 12.

29. 12 women can take 1 week to do a certain job. How long will 5 women take to complete the job if they work at the same rate?
- A.  $2\frac{11}{12}$  weeks.  
 B.  $16\frac{4}{5}$  days.  
 C. 17 days.  
 D. 1 week and 5 days.

30.



The area of triangle ABC above is

- A.  $24,2 \text{ cm}^2$ .  
 B.  $56 \text{ cm}^2$ .  
 C.  $32,4 \text{ cm}^2$ .  
 D.  $28 \text{ cm}^2$ .
31. The following table shows daily temperatures recorded from Monday to Thursday.

Day	Monday	Tuesday	Wednesday	Thursday	Friday
Temperature	$18^\circ\text{C}$	$20^\circ\text{C}$	$17^\circ\text{C}$	$14^\circ\text{C}$	*

If the average temperature for the five days was  $18^\circ\text{C}$ , what was the temperature recorded on Friday?

- A.  $14^\circ\text{C}$ .  
 B.  $18^\circ\text{C}$ .  
 C.  $20^\circ\text{C}$ .  
 D.  $21^\circ\text{C}$ .

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32. 3,456 in expanded notation is

- A.  $3\ 000 + 400 + 50 + 6.$   
 B.  $3\ 400 + 50 + 6.$   
 C.  $3 + \frac{4}{100} + \frac{5}{1000} + \frac{6}{10\ 000}.$   
 D.  $3 + \frac{4}{10} + \frac{5}{100} + \frac{6}{1000}.$

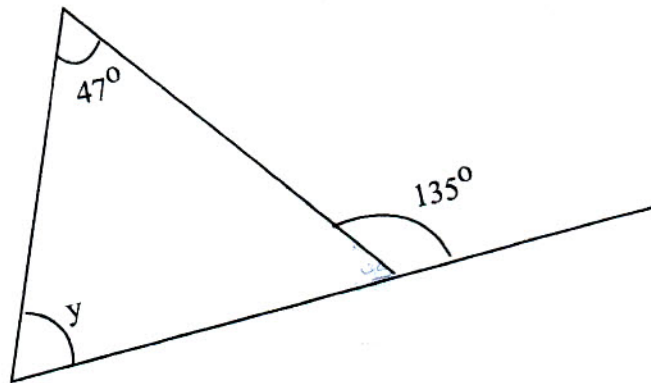
33. The Highest Common Factor (H.C.F) of 24 and 30 is

- A 2.  
 B 6.  
 C 120.  
 D 54.

34. An empty lorry weighs 2 500 kg. When fully loaded the lorry has a mass of 5,5 t. What is the mass of the load?

- A 3 t.  
 B 8 t.  
 C 255,5 t.  
 D 13,75 t.

35.



The size of the angle marked  $y$  in the triangle above is

- A.  $182^\circ.$   
 B.  $88^\circ.$   
 C.  $45^\circ.$   
 D.  $92^\circ.$

36.  $(2\frac{1}{3} - \frac{4}{5}) + 6 =$

A.  $\frac{23}{90}$ .

B.  $\frac{40}{45}$ .

C.  $1\frac{8}{15}$ .

D.  $\frac{47}{90}$ .

37. The Lowest Common Multiple (L.C.M) of 8; 9 and 12 is

A. 864.

B. 72.

C. 36.

D. 29.

38. A primary school has 740 pupils. If 35% are juniors, then the number of infants is

A 481.

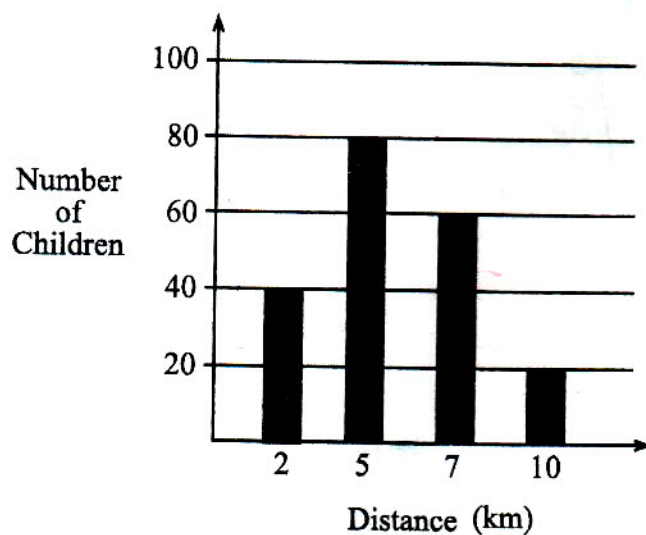
B 259.

C 705.

D 775.

Use the graph below to answer questions 39 and 40.

The bar graph shows the number of children and the distances they covered in a sponsored walk.



39. Which distance was covered by the least number of children?

A. 2 km.

B. 5 km.

C. 7 km.

D. 10 km.

40. How many children took part altogether?

- A. 80.
- B. 24.
- C. 200.
- D. 176.

41. Study the train time-table and answer the question that follows.

Mutare	Departure	0830
Rusape	Arrival	1145
	Departure	1153
Marondera	Arrival	1513
	Departure	1522
Harare	Arrival	1732

The time taken to travel from Rusape to Marondera is

- A. 3 hours 2 minutes.
  - B. 3 hours 37 minutes.
  - C. 3 hours 20 minutes.
  - D. 3 hours 28 minutes.
42. If the sum of 24 and 16 is subtracted from their product, the result is
- A. 40.
  - B. 344.
  - C. 384.
  - D. 424.
43. The diameter of a circle is twice the length of its
- A. circumference.
  - B. arc.
  - C. radius.
  - D. chord.
44. Mr Gumbo gets a commission of 4% on every item he sells. He sold items worth \$10 000. What was his commission?
- A. \$4.
  - B. \$40.
  - C. \$400.
  - D. \$4 000.

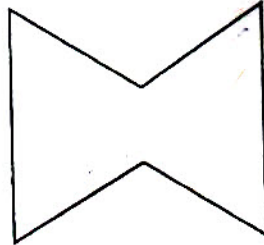
45. Mary spent  $\frac{1}{8}$  of her money on mangoes,  $\frac{1}{3}$  on a pen and  $\frac{1}{4}$  on sweets. She had \$1,40 left. How much did she have at first before spending?

A. \$4,40.  
B. \$4,80.  
C. \$1,40.  
D. \$2,10.

46. 150 kg decreased by 15% is

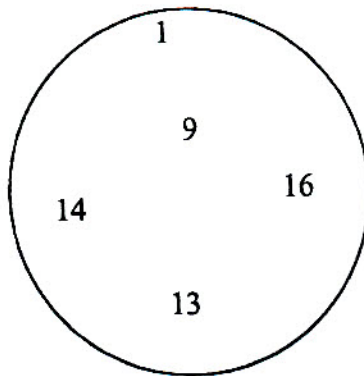
A. 127,5 kg.  
B. 135 kg.  
C. 22,5 kg.  
D. 165 kg.

47. How many lines of symmetry does the figure shown below have?



A. 0.  
B. 6.  
C. 2.  
D. 4.

- 48.



A prime number in the set of numbers shown above is

A. 1.  
B. 16.  
C. 9.  
D. 13.

49. A storekeeper bought goods from a wholesaler for \$178,50 and sold them to make a profit of \$13,25. What was the storekeeper's selling price?
- A. \$191,75.
  - B. \$311,00.
  - C. \$165,25.
  - D. \$200,50.
50. How many  $50 \text{ cm}^2$  wooden tiles are needed to cover a rectangular floor measuring 3 m by 2,5 m?
- A. 375.
  - B. 1 500.
  - C. 1 125.
  - D. 150.



**ZIMBABWE SCHOOL EXAMINATIONS COUNCIL**  
**GRADE SEVEN EXAMINATION**

**MATHEMATICS**  
**PAPER 2**

**002/2**

**OCTOBER 2011 SESSION**

**Time: 2 hours**

**INSTRUCTIONS TO CANDIDATES**

1. Answer **all** questions in Section **A**.
2. Answer any **three** questions in Section **B**.
3. Section **A** carries 25 marks.
4. Section **B** carries 15 marks.
5. To obtain full marks for any question, **all working** must be shown.
6. Do **not** measure from given diagrams.
7. Electronic calculators and slide rules **must not** be used in the examination.
8. **Underline** answers and rule off after each answer.

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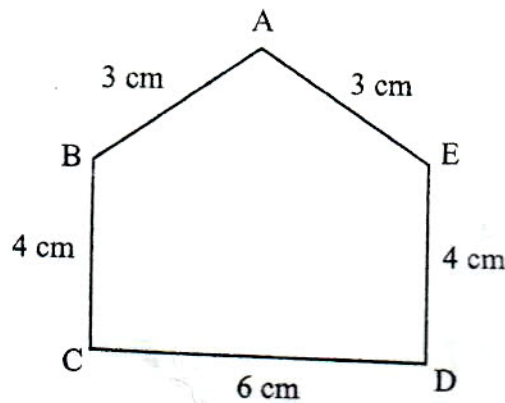
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## Section A (25 marks)

Answer *all* questions in this section.

1. (a) State the value of 6 in 36 238. [1]
- (b) Change 0,75 to a proper fraction in its lowest terms. [3]
2. Find the value of
  - (a)  $\frac{1}{8}$  of 64, [2]
  - (b)  $\frac{2}{3} + \frac{1}{4}$ . [2]
3. Simplify
  - (a)  $4 - 0,03$ , [1]
  - (b)  $0,2 \times 0,03$ . [1]
4. Calculate  $2\frac{1}{2}\%$  of 600. [2]
5. Simplify  $\frac{1}{5} - \frac{1}{2} + \frac{3}{4}$ . [2]
6. Change 3,2 km to metres. [2]
7. (a) What name is given to the shape shown in **Figure 1**? [1]



**Figure 1**

- (b) Find the number of lines of symmetry of the shape ABCDE. [1]
- (c) Calculate the perimeter of the shape. [2]

8. Sam bought a washing machine for \$200,00 on hire purchase. He paid 25% deposit and balance over 6 months.

Calculate

- (a) the deposit paid, [2]
- (b) the simple interest of 5% per annum which was charged on the balance. [3]

## Section B (15 marks)

Answer any **three** questions in this section.

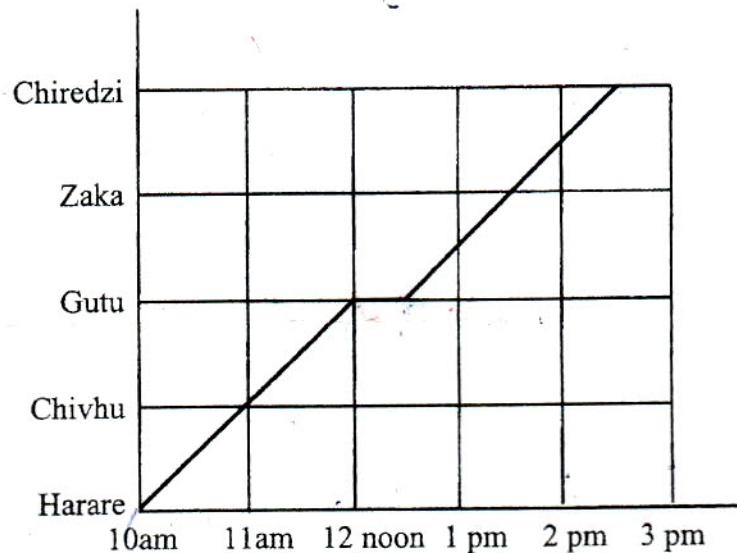
9. A bus has 40 passengers.  $\frac{1}{4}$  are women,  $\frac{1}{5}$  are men and the rest are children.

(a) (i) Calculate the number of women on the bus. [1]

(ii) Express the total number of men and women as a fraction. [2]

(b) Calculate the ratio of men to women in its simplest form. [2]

10. The graph shows a journey by car from Harare to Chiredzi which is 420 kilometres away. The car had a puncture at 12 noon.



(a) State the time taken to mend the puncture. [1]

(b) Calculate the actual time taken to travel from Harare to Chiredzi. [2]

(c) Find the average speed of the car excluding the time taken to mend the puncture. [2]

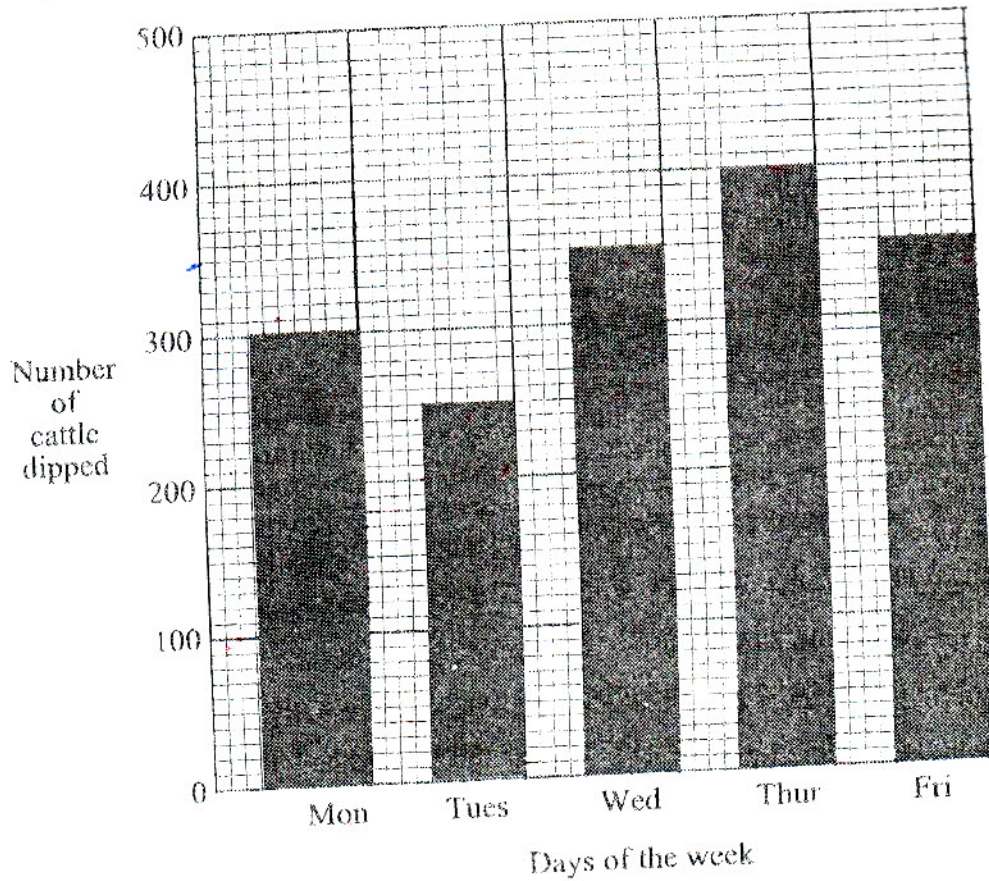
11. A rectangular swimming pool has a volume of  $40 \text{ m}^3$ . It is 8 m long and 1 m deep.

Calculate

(a) the width of the pool, [3]

(b) the capacity of the pool in litres. [2]

The bar graph shows the number of cattle that are dipped from Monday to Friday.



- (a) State the number of cattle dipped on Tuesday. [1]
- (b) How many more cattle were dipped on Friday than on Monday? [2]
- (c) Calculate the daily average number of cattle dipped. [2]
13. A man bought a piece of land measuring 200 m by 100 m. He made a garden on  $\frac{2}{5}$  of the land and the rest was used to build a home.
- (a) Calculate the area used for gardening. [2]
- (b) If 1 m<sup>2</sup> costs S10.00, what was the cost of the land used to build the home? [3]



**ZIMBABWE SCHOOL EXAMINATIONS COUNCIL**  
**GRADE SEVEN EXAMINATION**

**MATHEMATICS**  
**PAPER 1**

**002/1**

**OCTOBER 2012 SESSION**

**Time: 2 hours**

**INSTRUCTIONS TO CANDIDATES**

1. Read **all** the instructions carefully.
2. **Do not** open this booklet until you are told to do so by the invigilator.
3. Use only an HB pencil for all entries on the answer sheet.
4. When you are told to start, choose **one** correct answer from the suggested answers and shade it **very dark** as shown in the examples at the top of the answer sheet.
5. If you wish to change your answer, **erase it completely** with a pencil rubber and then shade the new choice.
6. If **more than one** box is shaded for any one answer, that answer will be regarded as **wrong**.
7. **If you do not understand** the instructions, **ask** the invigilator to explain them to you **before you start**.
8. Answer **all** the questions on the separate answer sheet provided.
9. Rough paper will be provided.

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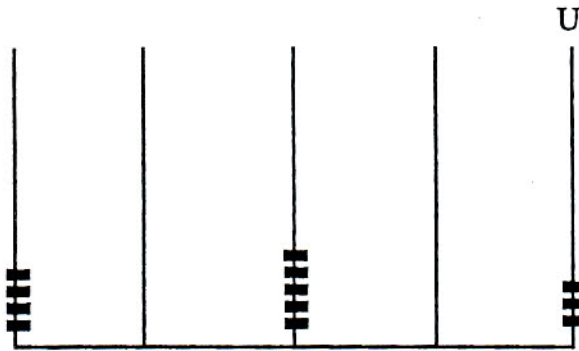
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1 The value of 4 in the number 843,70 is

- A 4.
- B 40.
- C 400.
- D 4 000.

2



What number is shown on the abacus?

- A 40 305.
- B 40 503.
- C 40 530.
- D 45 003.

3 39,19 to the nearest whole number is

- A 39.
- B 39,2.
- C 40.
- D 40,2.

4 L VII in Arabic numerals is

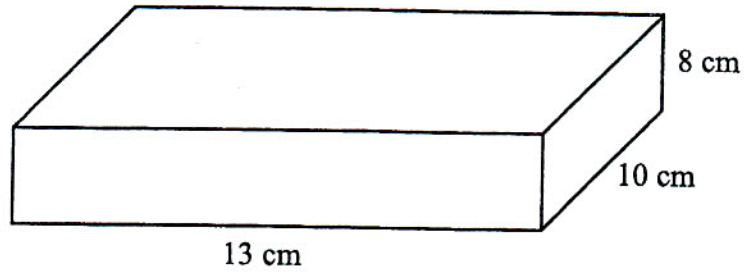
- A 77.
- B 67.
- C 57.
- D 17.

5 38% as a decimal fraction is

- A 0,038.
- B 0,38.
- C 3,8.
- D 38,0.

- 6 Three minutes after 12 midnight in 24 hour notation is
- A 00 03.
  - B 00 12.
  - C 12 03.
  - D 24 03.
- 7 The sum of two numbers is 80. If one number is 38, then the other is
- A 42.
  - B 52.
  - C 58.
  - D 118.
- 8 What fraction of 1 hour is 20 minutes?
- A  $\frac{1}{5}$ .
  - B  $\frac{1}{4}$ .
  - C  $\frac{1}{3}$ .
  - D  $\frac{3}{4}$ .
- 9 The product of 207 and 7 is
- A 200.
  - B 214.
  - C 1 409.
  - D 1 449.
- 10 A bus travelled a distance of 250 km in  $2\frac{1}{2}$  hours. Its average speed was
- A 80 km/h.
  - B 100 km/h.
  - C 125 km/h.
  - D 625 km/h.
- 11  $9,8 + 0,04 =$
- A 0,245.
  - B 2,45.
  - C 24,5.
  - D 245.

12



The volume of the rectangular prism above is

- A  $31 \text{ cm}^3$ .
  - B  $80 \text{ cm}^3$ .
  - C  $138 \text{ cm}^3$ .
  - D  $1\,040 \text{ cm}^3$ .
- 13 15 % of \$ 4 500,00 is
- A \$ 675.
  - B \$ 67,50.
  - C \$ 45.
  - D \$ 6, 75.
- 14 A mug holds a  $\frac{1}{4}$  litre of milk. How many mugs can be filled from a jug which holds  $2\frac{1}{2}$  litres?
- A 0,625.
  - B 5.
  - C 10.
  - D 20.
- 15 \$ 150 decreased by 50 % is
- A \$ 75.
  - B \$ 100.
  - C \$ 200.
  - D \$ 225.
- 16 Which of the following is a square number?
- A 22.
  - B 49.
  - C 51.
  - D 63.

17  $0,6 \times 0,04 =$

- A 2,4.
- B 0,24.
- C 0,024.
- D 0,0024.

18 The highest common factor of 15; 30 and 45 is

- A 3.
- B 5.
- C 15.
- D 45.

19  $15 + 9 \div 3 =$

- A 8.
- B 14.
- C 18.
- D 24.

20 Mrs Sibanda was offered 15 % discount for a suit marked \$ 98, 00. The amount she paid was

- A \$ 14,70.
- B \$ 83,00.
- C \$ 83,30.
- D \$ 112, 70.

21 A watch which is 5 minutes ahead shows 0305 hours. The correct time is

- A 0503.
- B 0310.
- C 0305.
- D 0300.

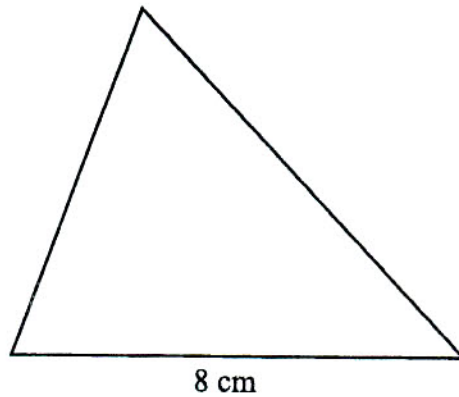
22  $1\frac{2}{3} \times \frac{3}{4} =$

- A  $\frac{1}{2}$ .
- B  $\frac{4}{5}$ .
- C  $1\frac{1}{4}$ .
- D  $1\frac{1}{2}$ .

23 If  $\frac{3}{5}$  of a number is 30, then  $\frac{2}{5}$  of that number is

- A 10.
- B 20.
- C 30.
- D 50.

24



The area of the triangle shown above is  $40 \text{ cm}^2$ . The height of the triangle is

- A 4 cm.
- B 5 cm.
- C 10 cm.
- D 20 cm.

25  $21 + 2 \times 72 =$

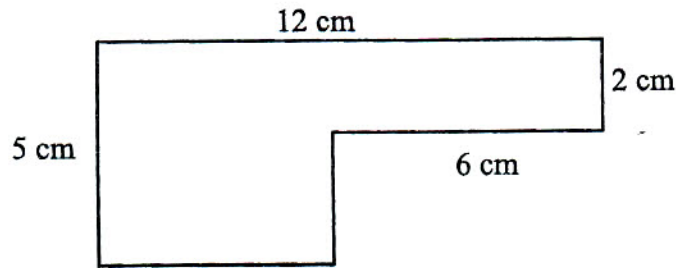
- A 1556.
- B 95.
- C 165.
- D 1512.

26 Calculate the following

Hours	Minutes
3	05
- 1	23

- A 1h 18 min.
- B 2h 82 min.
- C 2h 42 min.
- D 1h 42 min.

- 27 The area of the shape below is



- A  $18 \text{ cm}^2$ .  
 B  $42 \text{ cm}^2$ .  
 C  $60 \text{ cm}^2$ .  
 D  $72 \text{ cm}^2$ .
- 28 7 men take 5 weeks to complete a job. Working at the same rate, how long do 10 men take to complete the same job?
- A 70 weeks.  
 B  $7\frac{1}{2}$  weeks.  
 C 7 weeks.  
 D  $3\frac{1}{2}$  weeks.
- 29 The mass of the loaded truck is 1 590 kg. The mass of the load is 380kg. The mass of the empty truck is
- A 1 970 kg.  
 B 1 210 kg.  
 C 1 110 kg.  
 D 380 kg.
- 30 A man deposited \$ 100 in his bank account on Monday and withdrew \$ 25 on Friday. What was his balance?
- A \$ 75.  
 B \$ 85.  
 C \$ 125.  
 D \$ 2 500.
- 31 Which of the following numbers 1; 2; 3; 5 and 9 are **not** prime numbers?
- A 1 and 9  
 B 2 only  
 C 2 and 9  
 D 1; 3 and 5

- 32 In a class of 40 pupils, 15 are boys. What is the ratio of boys to girls?
- A 3:5
  - B 5:3
  - C 8:5
  - D 8:3
- 33 What is the cost of 80 oranges at 5c for 8?
- A \$ 6,40
  - B \$ 1,28
  - C 50c
  - D 16c
- 34 If the dividend is 201,50 and the quotient is 0,5, then the divisor is
- A 43.
  - B 403.
  - C 1 007,5.
  - D 100 750.
- 35 A teacher bought 120 oranges for a class of 40 pupils. How many oranges did each pupil get if they were shared equally?
- A 3.
  - B 4.
  - C 80.
  - D 160.
- 36 The value of 3 right angles is
- A  $360^\circ$ .
  - B  $270^\circ$ .
  - C  $180^\circ$ .
  - D  $90^\circ$ .
- 37 A woman earns \$ 10,28 per day. How much will she earn in five days?
- A \$ 2,05.
  - B \$ 5,25.
  - C \$ 15,25.
  - D \$ 51,40.

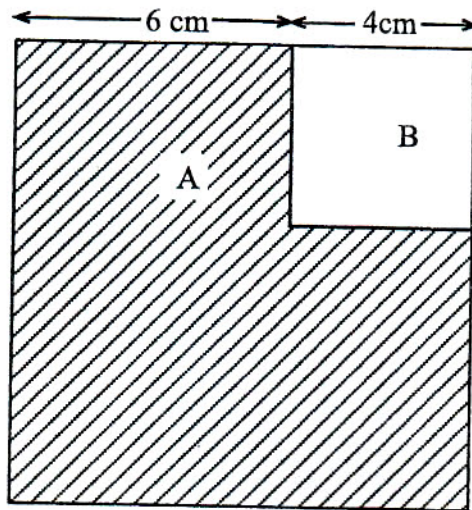
38 The simple interest earned on \$ 200 invested at 5 % per annum for 4 years is

- A \$ 20.
- B \$ 40.
- C \$ 160.
- D \$ 240.

39 A car travels at 60 km/hr. The distance travelled in 80 minutes is

- A 45 km.
- B 80 km.
- C 140 km.
- D 4 800 km.

40



What is the area of the shaded part if B is a square in square A?

- A  $16 \text{ cm}^2$ .
- B  $36 \text{ cm}^2$ .
- C  $84 \text{ cm}^2$ .
- D  $100 \text{ cm}^2$ .

41 A rectangle has a perimeter of 30 cm. The ratio of its length to width is 3:2. The area of the rectangle is

- A  $54 \text{ cm}^2$ .
- B  $60 \text{ cm}^2$ .
- C  $108 \text{ cm}^2$ .
- D  $150 \text{ cm}^2$ .

- 42 Sarudzai bought 2 kg of meat and got 50c change from \$10,00. What was the price per kg?
- A \$ 4,50.
  - B \$ 4,75.
  - C \$ 9,50.
  - D \$ 9,00.
- 43 A wheel makes 15 complete turns in 5 seconds. The time it takes to make 60 complete turns is
- A 9 seconds.
  - B 12 seconds.
  - C 20 seconds.
  - D 75 seconds.
- 44 Tamuka, Tanaka and Tinashe have masses of 25 kg, 30 kg and 35 kg respectively. Their average mass is
- A 270 kg.
  - B 30 kg.
  - C 35 kg.
  - D 90 kg.
- 45  $5\frac{2}{3} \div 1\frac{1}{2} =$
- A  $3\frac{7}{9}$ .
  - B  $3\frac{1}{6}$ .
  - C  $5\frac{1}{3}$ .
  - D  $8\frac{1}{2}$ .
- 46 A football ground measures 90 m by 45 m. An athlete ran 4 times right round the field. The total distance covered by the athlete was
- A 180 m.
  - B 270 m.
  - C 540 m.
  - D 1 080 m.

- 47 80 tickets were sold at \$ 10,50 each and 100 at \$ 7,50 each. How much was collected altogether?

A \$ 1 590,00.  
B \$ 159, 00.  
C \$ 90,00.  
D \$ 18,00.

- 48 The table shows different types of vehicles passing through Murombedzi growth point on Friday afternoon.

Vehicle	Car	Lorry	Bus	Bicycle
Frequency	12	10	5	23

How many lorries were there for every one bus?

- A 50.  
B 10.  
C 5.  
D 2.
- 49 A vendor was paid 5 % commission on goods sold for \$ 250. What was the commission?
- A \$ 2,50.  
B \$ 12,50.  
C \$ 15,00.  
D \$ 25,00.

50

Chinhoyi

105	Harare			
185	80	Murehwa		
235	130	50	Mudzi	
245	140	60	10	Nyamapanda

If a bus travels at an average speed of 70 km/h, then the time taken to travel from Harare to Nyamapanda is

- A 2 h.
- B  $1\frac{1}{2}$  h.
- C 1 h.
- D  $\frac{1}{2}$  h.



**ZIMBABWE SCHOOL EXAMINATIONS COUNCIL**  
**GRADE SEVEN EXAMINATION**

**MATHEMATICS**  
**PAPER 2**

**002/2**

**OCTOBER 2012 SESSION**

**Time: 2 hours**

**INSTRUCTIONS TO CANDIDATES**

1. Answer **all** questions in Section A.
2. Answer any **three** questions in Section B.
3. Section A carries 25 marks.
4. Section B carries 15 marks.
5. To obtain full marks for any question, **all working** must be shown.
6. Do **not** measure from given diagrams.
7. Electronic calculators and slide rules **must not** be used in the examination.
8. **Underline** answers and rule off after each answer.

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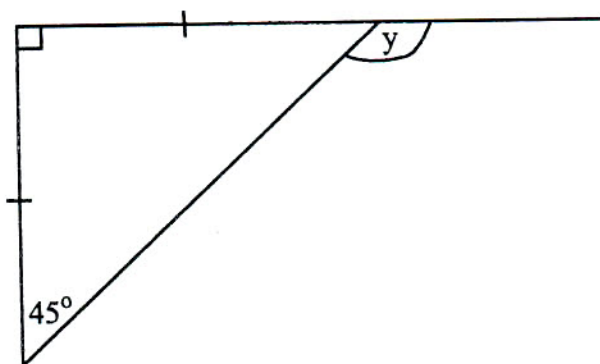
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## Section A (25 marks)

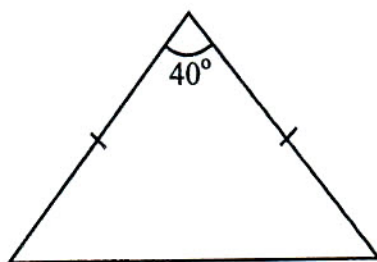
Answer *all* questions in this section.

- 1 (a) Find the difference between 93 421 and 61 257. (1)
- (b) Round off 473, 99 to the nearest tenth. (1)
- 2 (a) Simplify  $10 \div 5 \times 2$ . (2)
- (b)



Calculate angle  $y$ . (2)

- 3 (a) Express  $\frac{7}{20}$  as a percentage. (2)
- (b) The diagram shows a triangle.



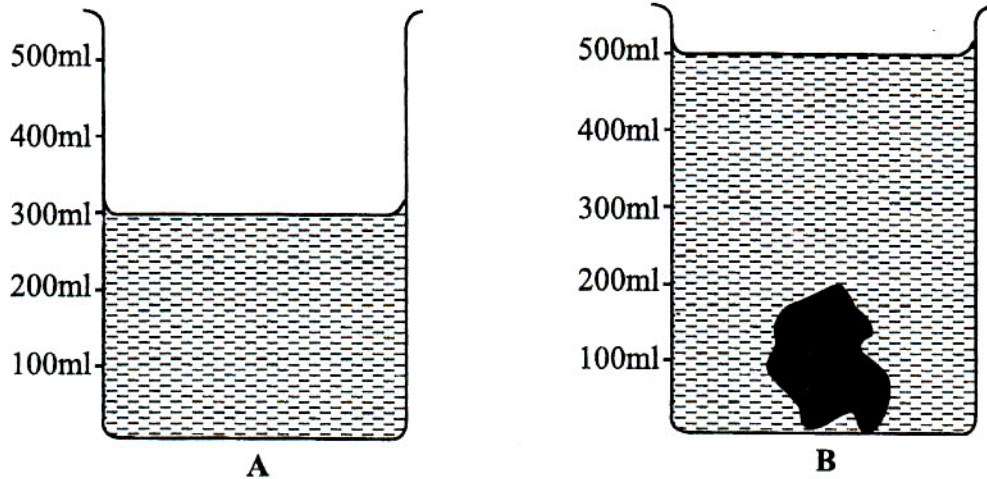
State the number of lines of symmetry the triangle has. [1]

- 4 John earns 3 dollars per hour working for 8 hours a day from Monday to Friday.

Calculate the amount earned in five days.

[3]

5



Water was put in container A. A stone was placed into the container and the water rose to the level shown in B.

- (a) Find the volume of the stone in  $\text{cm}^3$ . (3)
- (b) Express the ratio of water level in container A to that in B in its lowest terms. (2)

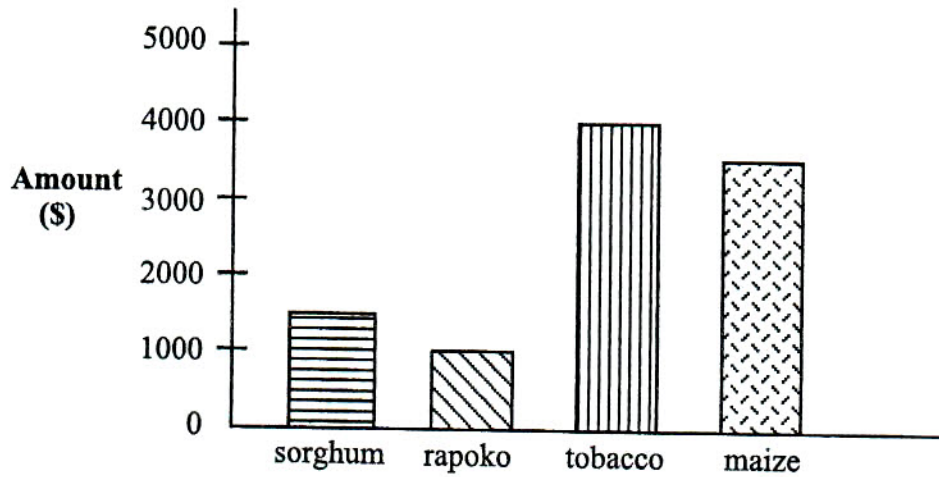
[5]

- 6 Four schools had an average pass rate of 94,5 %. If the first three schools had 98 %, 90 % and 96 % respectively,

calculate the pass rate for the fourth school.

[4]

- 7 The graph shows the amount of money got from sales of different crops by a farmer to the Grain Marketing Board.



Find:

- (a) the total amount the farmer got from selling sorghum and maize, (2)
- (b) the difference between the amount earned from selling tobacco and rapoko. (2)

[4]

## Section B (15 marks)

Answer any **three** questions from this section.

- 8 Temba works on Mondays, Wednesdays and Fridays and earns \$10 per day.

Sun	Mon	Tue	Wed	Thurs	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28						

- (a) Find the amount earned by Temba on the calendar month shown. (2)
- (b) Calculate the amount left if he spends  $\frac{1}{3}$  of his earnings on food. (3)

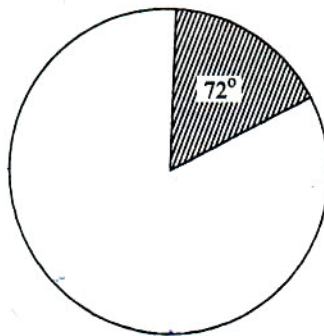
[5]

- 9 The volume of a water tank when full is  $2\text{m}^3$ .

- (a) Calculate in kilograms the mass of a full water tank if 1 litre weighs 1 000 grams. (3)
- (b) Express mass obtained in (a) in tonnes. (2)

[5]

- 10 The pie chart represents a cake. The part shaded represents one piece.



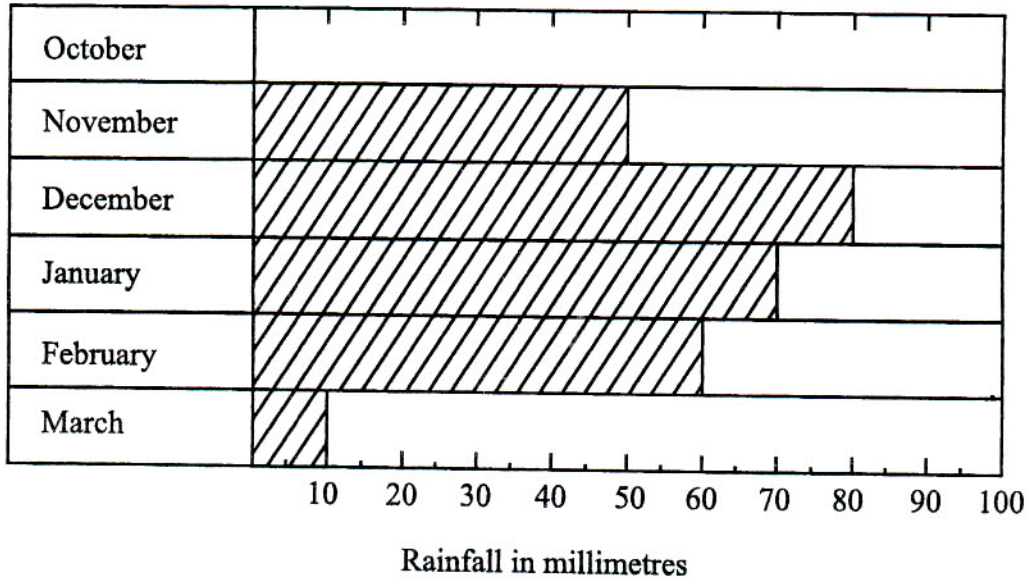
Calculate

- (a) the number of equal pieces that could be cut from the whole cake, (3)
- (b) the size of the angle of the remaining cake if only one piece was eaten. (2)

[5]

[Turn over

- 11 The graph shows rainfall pattern for Harare.



- (a) How much more rain fell in November than in March? (2)
- (b) Calculate the average rainfall for the six months. (3)

- 12 The following is an invoice for Mrs Kombo. [5]

	\$	c
2 shirts at \$ 7,50 each	15	00
3 dresses at \$ 15, 00 each	45	00
1 trunk at \$ 50, 00 each	50	00
Sub-total	_____	_____
10 % Value Added tax	_____	_____
Total	_____	_____

- (a) Calculate the total amount paid including value added tax. (3)
- (b) If she used \$130 to pay for the goods bought, calculate her change. (2)

[5]



**ZIMBABWE SCHOOL EXAMINATIONS COUNCIL**  
**GRADE SEVEN EXAMINATION**

**MATHEMATICS**  
**PAPER 1**

**002/1**

**OCTOBER 2013 SESSION**

**Time: 2 hours**

**INSTRUCTIONS TO CANDIDATES**

1. Read **all** the instructions carefully.
2. **Do not** open this booklet until you are told to do so by the invigilator.
3. Use only an HB pencil for all entries on the answer sheet.
4. When you are told to start, choose **one** correct answer from the suggested answers and shade it **very dark** as shown in the examples at the top of the answer sheet.
5. If you wish to change your answer, **erase it completely** with a pencil rubber and then shade the new choice.
6. If **more than one** box is shaded for any one answer, that answer will be regarded as **wrong**.
7. **If you do not understand** the instructions, **ask** the invigilator to explain them to you **before you start**.
8. Answer **all** the questions on the separate answer sheet provided.
9. Rough paper will be provided.

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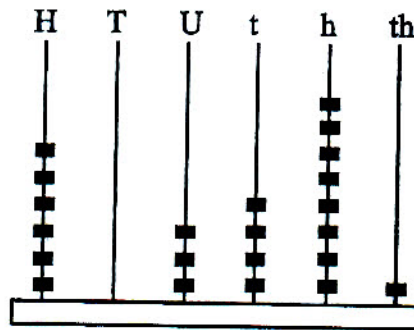
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1 One thousand and twenty in numerals is

- A 1 002.
- B 1 020.
- C 1 200.
- D 10 020.

2 The number represented by the abacus is



- A 36,418.
- B 63,481.
- C 603,481.
- D 603,841.

3 Which of these numbers is an ordinal number?

- A Twenty
- B 20<sup>th</sup>
- C 20.
- D 0,20.

4  $\frac{3}{5}$  as a decimal fraction is

- A 0,6.
- B 3,5.
- C 5,3.
- D 6,0.

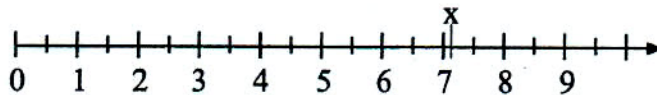
5 27,461 correct to one decimal place is

- A 27.
- B 27,46.
- C 27,5.
- D 30.

6 The value of the underlined digit in 3539 m is

- A 0,5 m.
- B 5 m.
- C 50 m.
- D 500 m.

7 In the number line below X is approximately



- A  $7\frac{1}{6}$ .
- B  $7\frac{1}{4}$ .
- C  $7\frac{1}{2}$ .
- D  $7\frac{3}{4}$ .

8 What is \$ 130,08 in cents?

- A 138
- B 1 308
- C 1 380
- D 13 008

9 A number is doubled and 9 is added to get 21. The number is

- A 3.
- B 6.
- C 12.
- D 24.

10 18 as a product of its prime factors is

- A  $2 \times 9$ .
- B  $3 \times 6$ .
- C  $2 \times 3 \times 3$ .
- D  $1 \times 18$ .

11  $8\ 000 - 7\ 896 =$

- A 104.
- B 106.
- C 896.
- D 1 896.

12 If  $24 \div 8 = 3$ , then  $0,24 \div 0,8$  is

- A 30.
- B 3.
- C 0,3.
- D 0,03.

13  $\frac{4}{5}$  of \$450 is

- A \$ 90.
- B \$ 280.
- C \$ 320.
- D \$ 360.

14  $54 \div y = 9$

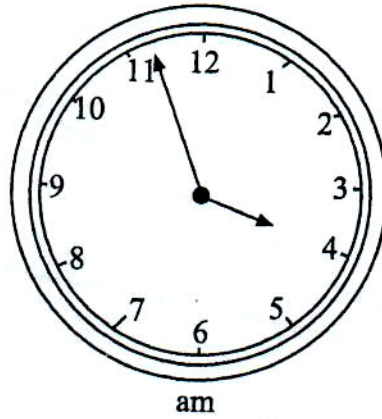
Therefore y is

- A 5.
- B 6.
- C 7.
- D 9.

15 How many years is five decades?

- A 5.
- B 10.
- C 50.
- D 500.

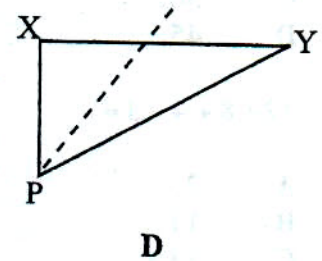
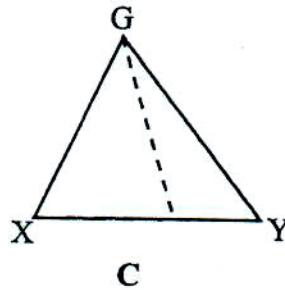
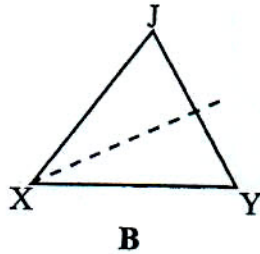
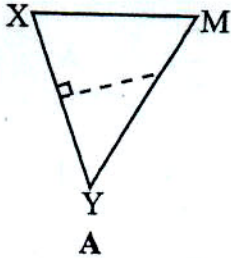
- 16 The time shown on the clock is



- A 3.11 a.m.  
 B 3.53 a.m.  
 C 3.57 a.m.  
 D 11.18 a.m.
- 17 The sum of  $4c$ ; \$1,03 and  $62c$  is

- A \$1,69.  
 B \$2,05.  
 C \$4,65.  
 D \$5,65.

- 18 Which dotted line is perpendicular to line XY?

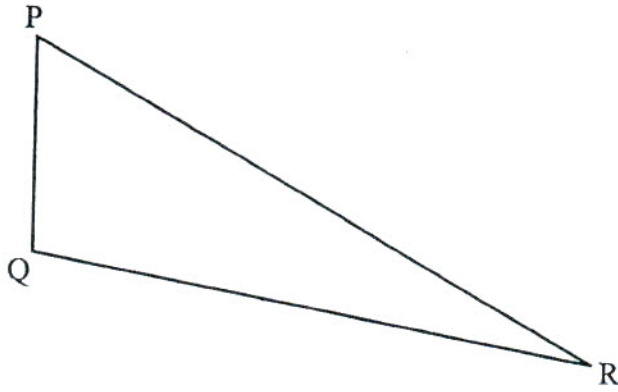


- 19  $\frac{3}{8}$  of a day in hours is

- A 3.  
 B 6.  
 C 9.  
 D 15.

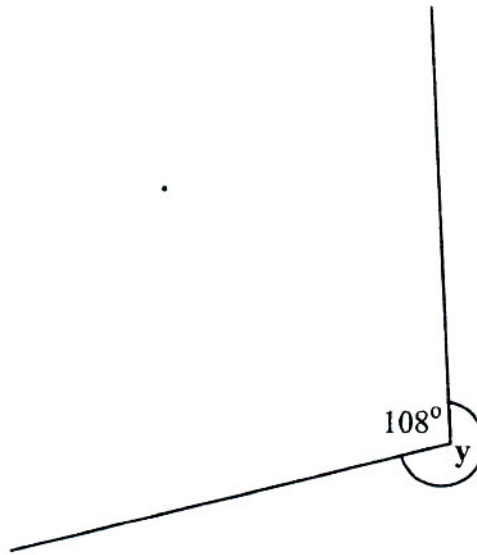
- 20 The product of 104 and 14 is
- A 90.
  - B 118.
  - C 1 040.
  - D 1 456.
- 21 675 kg in tonnes is
- A 0,675.
  - B 6,75.
  - C 67,50
  - D 6 750.
- 22 2,5 out of 100 as a percentage is
- A 0,025.
  - B 2,5.
  - C 250.
  - D 97,5.
- 23  $\frac{2}{5}$  of a number is 18. What is  $\frac{1}{5}$  of the number?
- A 9.
  - B 18.
  - C 36.
  - D 45.
- 24  $12 + 8 + 4 - 3 =$
- A 2.
  - B 11.
  - C 13.
  - D 20.

- 25 The triangle PQR below is

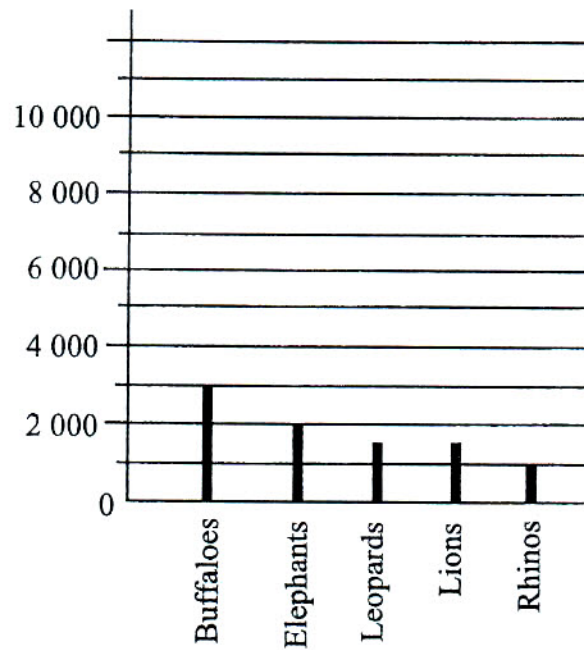


- A equilateral.  
B right angled.  
C isosceles.  
D scalene.
- 26 The ratio of 90 apples to 240 oranges in its simplest form is
- A 3: 8.  
B 8: 3.  
C 9: 24.  
D 24: 9.
- 27  $1\frac{1}{2} + 2\frac{1}{4} + 1\frac{3}{5} =$
- A  $4\frac{7}{20}$   
B  $4\frac{17}{20}$   
C  $5\frac{7}{20}$   
D  $5\frac{17}{20}$
- 28 The average mass of 25 boys in a village is 23 kg. What is the total mass of the boys?
- A 48 kg.  
B 465 kg.  
C 500 kg.  
D 575 kg.

- 29 The value of angle  $y$  is.



- A  $268^\circ$ .  
 B  $252^\circ$ .  
 C  $216^\circ$ .  
 D  $198^\circ$ .
- 30 The graph shows animals kept in different national parks.



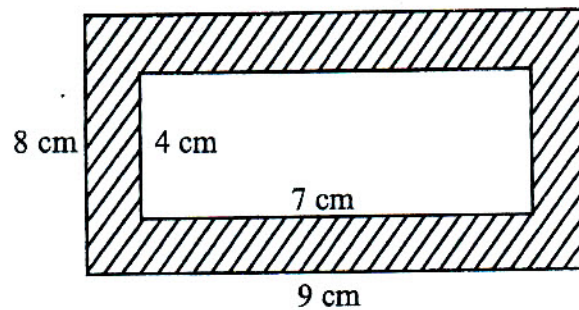
What is the total number of animals in the parks?

- A 8 000  
 B 8 500  
 C 9 000  
 D 9 500

31  $3\frac{2}{3} - 1\frac{3}{4} =$

- A  $1\frac{11}{12}$   
 B  $2\frac{1}{12}$   
 C  $2\frac{5}{12}$   
 D  $4\frac{1}{12}$

32 The area of the shaded part in the rectangle is



- A  $28 \text{ cm}^2$ .  
 B  $44 \text{ cm}^2$ .  
 C  $72 \text{ cm}^2$ .  
 D  $34 \text{ cm}^2$ .

33  $1\frac{7}{8} \times 3\frac{1}{5} =$

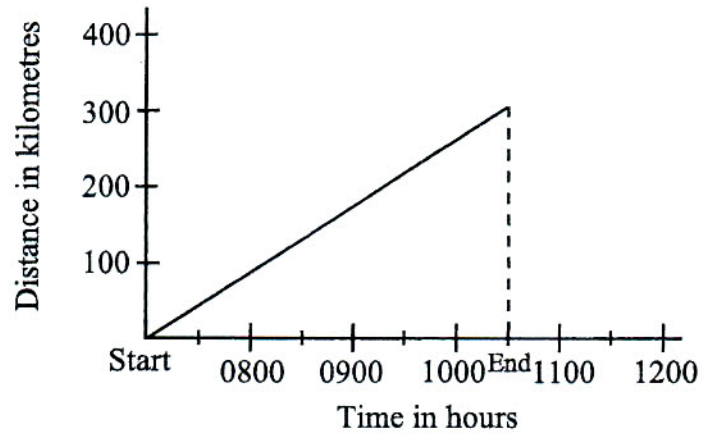
- A 2.  
 B 3.  
 C 4.  
 D 6.

34 Mr Chabuda's woodlot had 375 trees. 96 of them were cut and removed and he planted 123 more. The number of trees in the woodlot is

- A 219.  
 B 279.  
 C 402.  
 D 498.

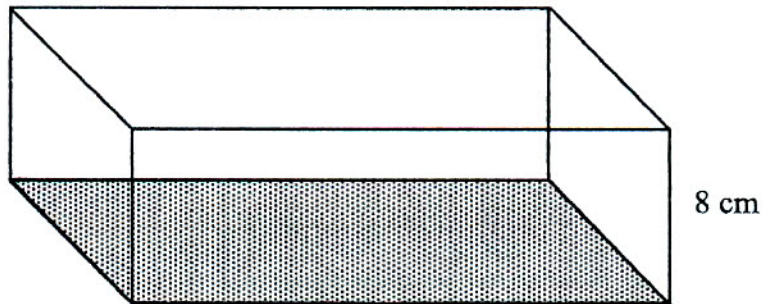
- 35  $\frac{9}{10} + 3 =$
- A  $3\frac{1}{3}$ .
- B  $2\frac{7}{10}$ .
- C  $\frac{3}{10}$ .
- D  $\frac{1}{10}$ .
- 36 100 books were shared between Givmore and Alice such that Alice got 10 more than Givmore. Givmore got
- A 45.
- B 50.
- C 55.
- D 60.
- 37 Mr Kondo had 126 empty bottles left after selling  $\frac{5}{8}$  of them. How many bottles did he have at first?
- A 134
- B 320
- C 336
- D 428
- 38  $3\frac{1}{2} + 1\frac{1}{4} =$
- A  $2\frac{1}{5}$ .
- B  $2\frac{4}{5}$ .
- C  $3\frac{4}{5}$ .
- D  $4\frac{3}{8}$ .

- 39 The graph shows the departing time and arrival time of a van.



How long did the journey take?

- A 2h 25 min.  
 B 3h 30 min.  
 C 4h 30 min.  
 D 8h 30 min.
- 40 The area of the shaded part of the rectangular prism is  $72 \text{ cm}^2$  and the height is 8 cm.



The volume of the prism is

- A  $9 \text{ cm}^3$ .  
 B  $80 \text{ cm}^3$ .  
 C  $566 \text{ cm}^3$ .  
 D  $576 \text{ cm}^3$ .
- 41  $0,6 + 0,003 =$

- A 0,002  
 B 2  
 C 20  
 D 200.

- 42 A bottle of medicine holds 56 ml. If Mary takes 2 ml four times a day, how many days does the medicine last her?
- A 7  
B 8.  
C 14.  
D 28.
- 43 The marked price of a pot is \$345,60. If 5 % discount is offered, the amount paid is
- A \$17,28.  
B \$17,40.  
C \$328,32.  
D \$362,88.
- 44 A floor measures 6 m by 4 m and is fitted with tiles measuring 40 cm by 20 cm each. How many tiles are needed to cover the floor?
- A 24.  
B 60.  
C 150.  
D 300.
- 45 A sprinter completed a 250 m race in 25 seconds. His average speed in km/h is
- A 9.  
B 10.  
C 36.  
D 1 00.
- 46 What is the interest on \$1 500 at 2,5 % per annum for 6 years?
- A \$ 225.  
B \$ 375.  
C \$ 1 725.  
D \$ 1 875.

The table shows petrol sales in a week. Use it to answer questions 47 and 48.

DAY	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
PETROL (IN LITRES)	2648	4021	2609	1207	5492	3999	6553

47 What is the difference between the amount of petrol sold on Saturday and that sold on Tuesday?

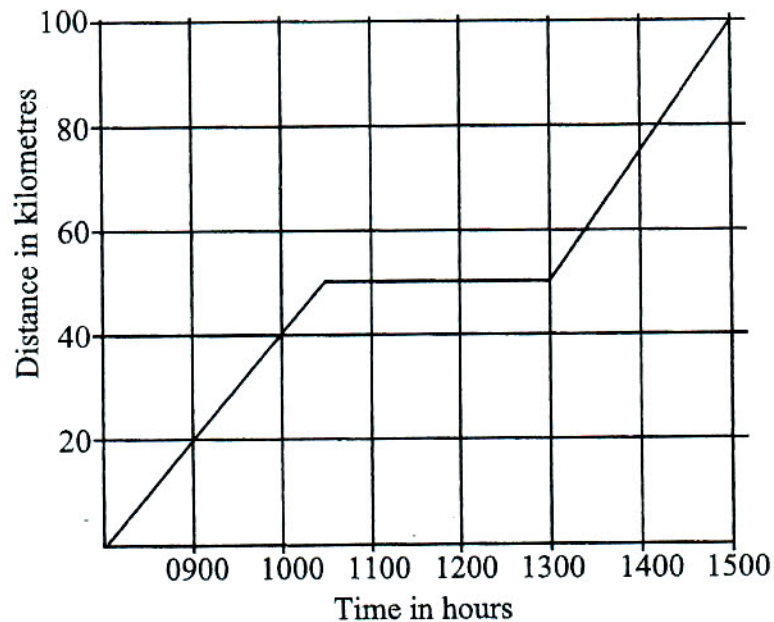
- A 3 944.
- B 4 156.
- C 4 944.
- D 4 156.

48 The least amount of petrol was sold on

- A Saturday.
- B Sunday.
- C Friday.
- D Wednesday.

Use the graph below to answer question 49 and 50.

The graph shows Nothando's racing journey by a bicycle.



49 How long did Nothando take to complete the race including stoppage time?

- A 5 h.
- B 7 h.
- C 8 h.
- D 9 h.

50 The total time taken by Nothando resting and mending her bicycle is

- A 30 minutes.
- B 1 hr.
- C  $1\frac{1}{2}$  hr.
- D  $2\frac{1}{2}$  hr.



**ZIMBABWE SCHOOL EXAMINATIONS COUNCIL**  
**GRADE SEVEN EXAMINATION**

**MATHEMATICS**  
**PAPER 2**

**002/2**

**OCTOBER 2013 SESSION**

**Time: 2 hours**

**INSTRUCTIONS TO CANDIDATES**

1. Answer **all** questions in Section **A**.
2. Answer any **three** questions in Section **B**.
3. Section **A** carries 25 marks.
4. Section **B** carries 15 marks.
5. To obtain full marks for any question, **all working** must be shown.
6. Do **not** measure from given diagrams.
7. Electronic calculators and slide rules **must not** be used in the examination.
8. **Underline** answers and rule off after each answer.

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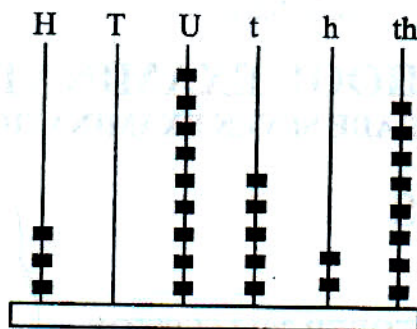
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## Section A (25 marks)

Answer all questions in this section.

1. (a) Write down the number shown on the abacus.



[1]

- (b) Express  $\frac{3}{7}$  of a fortnight in days.

[2]

2. (a) Find the product of 4,2 and 0,03.

[2]

- (b) Simplify  $\frac{1}{4}$  of  $\frac{1}{4} + \frac{1}{8}$

[2]

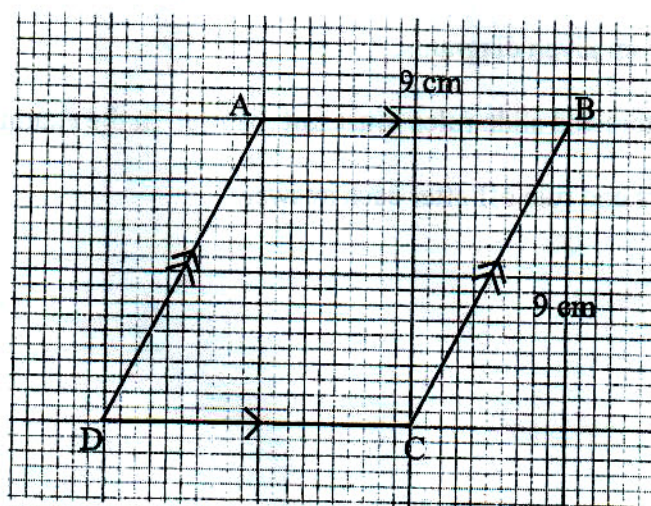
3. (a) Express 25 minutes 30 seconds in seconds.

[2]

- (b)  $90,09 \div 0,9$

[2]

4.



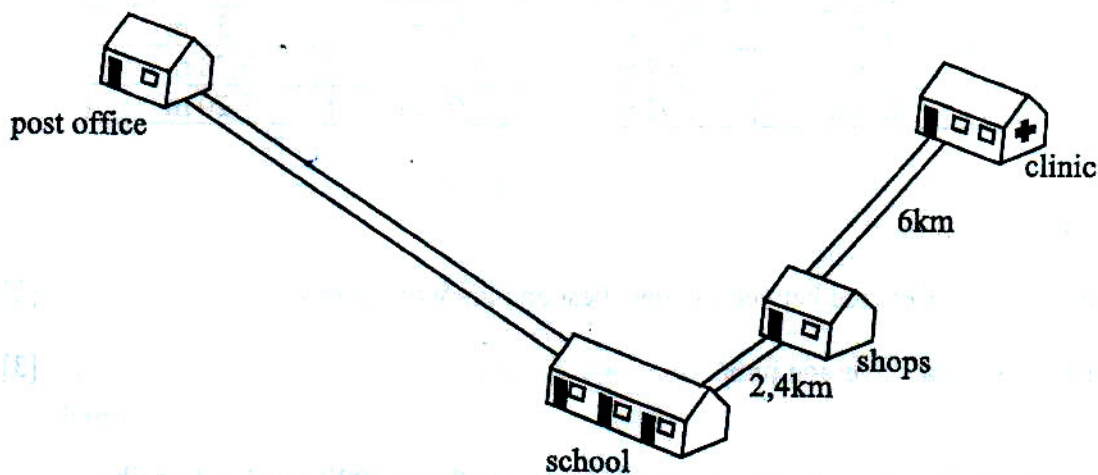
- (a) Name the shape ABCD.

[1]

- (b) Name a line parallel to line AD.

[1]

5. A student added  $\frac{3}{8}$  litres of Mazoe orange juice to 500 ml of water. Calculate the total volume of the drink. [3]
6. A box of apples is shared between Chipu and Lizzy in the ratio of 3:5. If Chipu gets 18 apples, find the number of apples Lizzy gets. [2]
7. Mrs Khumalo bought 20 packets of fruit for \$50. She kept 2 packets for her family and sold the rest at \$4 per packet. Find the profit she made. [3]
8. The diagram shows the road from the Post Office to the clinic passing through the school and shops. The road is 15 km long.



- (a) Calculate the distance from the school to the clinic. [1]
- (b) Find the distance from the Post Office to the school. [1]
- (c) Rutendo walked from school to the Post Office and she took 2 hours 20 minutes. Calculate Rutendo's speed correct to 2 decimal places. [2]

## Section B (15 marks)

Answer any *three* questions in this section.

9. A teacher had a 25 m roll of cloth. He used 12,28m to make suits and 5,5 m to make shorts.

- (a) Find the length of cloth left. [3]
- (b) If he made 4 suits of the same size, find the length of material used to make each suit. [2]

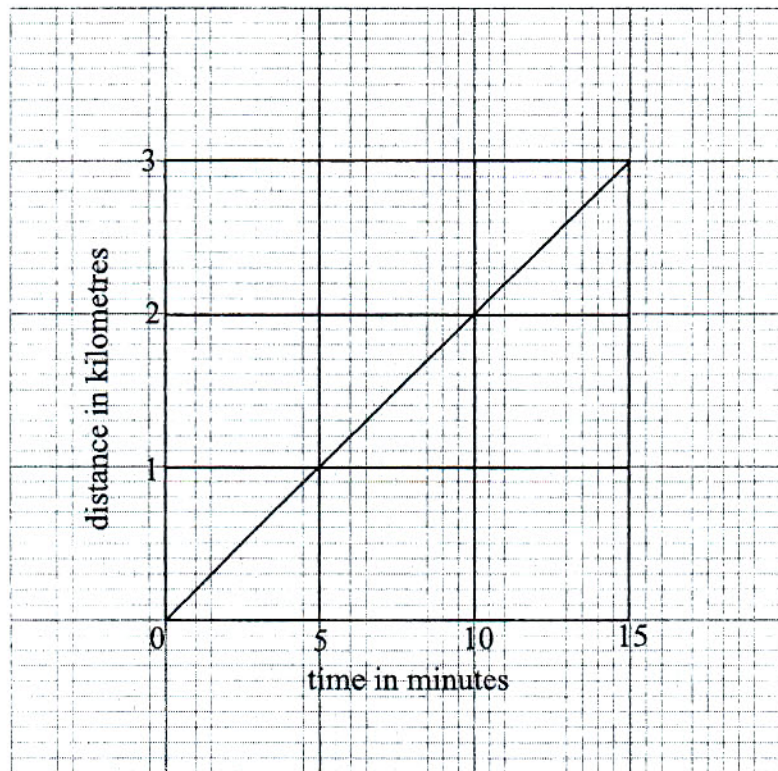
10. The table shows long jump results.

Athlete	1 <sup>st</sup> Attempt	2 <sup>nd</sup> Attempt	3 <sup>rd</sup> Attempt
Joshua	3,07 m	2,95 m	3,55 m
John	2,87 m	3,15 m	3,78 m
James	1,92 m	3,95 m	3,20 m

Find

- (a) the difference between James' best and his worst jump. [2]
- (b) Joshua's average jump. [3]
11. There are 80 dairy cows on a farm. Each cow produces 10 litres of milk daily.
- (a) Calculate the amount of milk produced in a fortnight. [2]
- (b) 2 litres of milk is sold at \$1,50. Find the amount the farmer earned in the month of **April**. [3]
12. 1 000 tractors were donated to 30 districts. They shared 75% of them equally and the remainder were given to a co-operative.
- (a) Calculate the number of tractors given to each district. [3]
- (b) Find the number of tractors given to the co-operative. [2]

13. (a) The graph shows the distance travelled by Rudo from home to the shopping centre.



Find Rudo's average speed in kilometers per hour from home to the shopping centre. [2]

- (b) The area of a rectangular field is 300 ares. Its length is 200 metres. Find its width in metres. [3]



For Performance Measurement

# ZIMBABWE SCHOOL EXAMINATIONS COUNCIL

## GRADE SEVEN EXAMINATION

**MATHEMATICS**  
**PAPER 1**

**002/1**

**OCTOBER 2014 SESSION**

**Time: 2 hours**

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- A 7 900.
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3  $\frac{16}{24}$  as a fraction in its simplest form is

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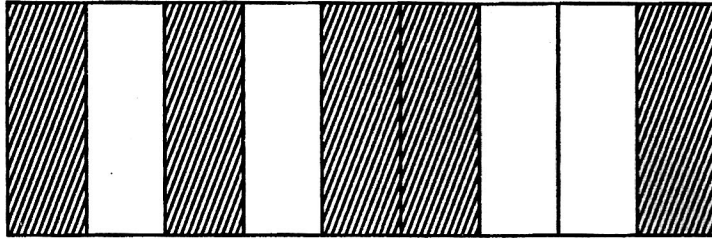
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- D  $1\frac{2}{3}$ .

5  $36,95 + 7,89 =$

- A 44,74.
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- 6 The rectangle below is divided into 9 equal parts. What fraction of the rectangle is shaded?



- A  $\frac{2}{9}$   
B  $\frac{3}{9}$   
C  $\frac{4}{9}$   
D  $\frac{5}{9}$

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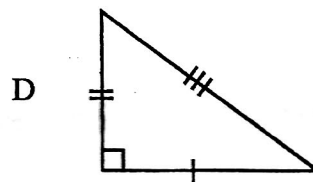
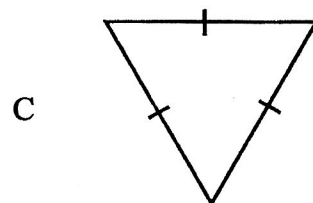
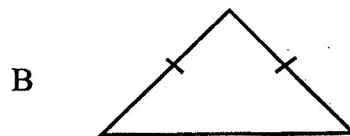
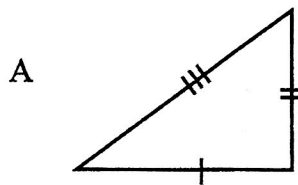
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- A  $\frac{1}{2}$ ;  $\frac{2}{5}$  and  $\frac{1}{3}$ .
- B  $\frac{1}{3}$ ;  $\frac{2}{5}$  and  $\frac{1}{2}$ .
- C  $\frac{2}{5}$ ;  $\frac{1}{2}$  and  $\frac{1}{3}$ .
- D  $\frac{1}{2}$ ;  $\frac{1}{3}$  and  $\frac{2}{5}$ .

- 11 The missing fraction in the pattern  $\frac{5}{6}$ ; ;  $\frac{3}{4}$ ;  $\frac{2}{3}$ ;  $\frac{1}{2}$  is

- A  $\frac{4}{5}$ .
- B  $\frac{1}{5}$ .
- C  $\frac{3}{5}$ .
- D  $\frac{4}{6}$ .

- 12** Which of the following triangles is an equilateral?



- 13** A farmer has fifty animals. Twenty of them are cattle, eighteen are sheep and the rest are goats. The number of goats expressed as a percentage of the total number of animals is

- A 76 %.
- B 40 %.
- C 18 %.
- D 24 %.

- 14** A mass of 250 grammes expressed in kilogrammes is

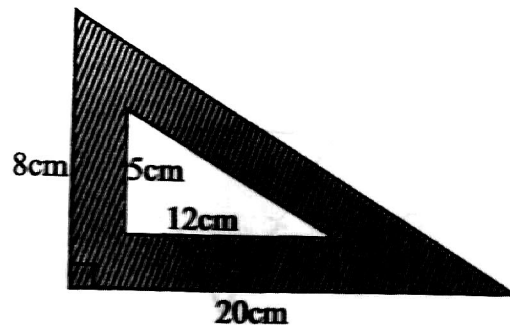
- A 0,025.
- B 0,25.
- C 2,5.
- D 25.

- 15** The time 0018 hours expressed in ordinary time is

- A 18 minutes past 12 in the afternoon.
- B 18 minutes to 12 in the morning.
- C 18 minutes past 12 mid night.
- D 18 minutes to 12 mid night.

- 16 A cyclist covered a distance of 30 km in 45 minutes. The average speed of the cyclist was
- A 40 km/hr.
  - B 22,5 km/hr.
  - C 0,66 km/hr.
  - D 1,5 km/hr.

17



The area of the shaded part in the diagram is

- A  $80 \text{ cm}^2$ .
  - B  $30 \text{ cm}^2$ .
  - C  $50 \text{ cm}^2$ .
  - D  $110 \text{ cm}^2$ .
- 18 Jane, Peter and Alice shared \$ 200 in the ratio 2:3:5 respectively. How much did **Peter** get?
- A \$ 40.
  - B \$ 100.
  - C \$ 140.
  - D \$ 60.
- 19 The cost of 15 m of cloth at \$ 5,50 per metre is
- A \$ 70,50.
  - B \$ 82,50.
  - C \$ 80,50.
  - D \$ 72,50.

$$\frac{351}{463} =$$

**A**  $1\frac{1}{3}$ .

**B**  $1\frac{4}{5}$ .

**C**  $1\frac{1}{4}$ .

**D**  $\frac{4}{5}$ .

**21** A rectangular water tank measures 8 m by 6 m by 3 m. Its volume in  $\text{m}^3$  is

**A**  $144 \text{ m}^3$ .

**B**  $17 \text{ m}^3$ .

**C**  $34 \text{ m}^3$ .

**D**  $124 \text{ m}^3$ .

**22**  $\frac{3}{4}$  of a day expressed in hours is

**A** 18 hours.

**B** 75 hours.

**C** 36 hours.

**D** 9 hours.

**23** The capacity of a car tank is 80 litres. When the tank is 40 % full, the amount of petrol is

**A** 200 litres.

**B** 48 litres.

**C** 112 litres.

**D** 32 litres.

**24**  $20.50 + 0.5 =$

**A** 20.10.

**B** 41.

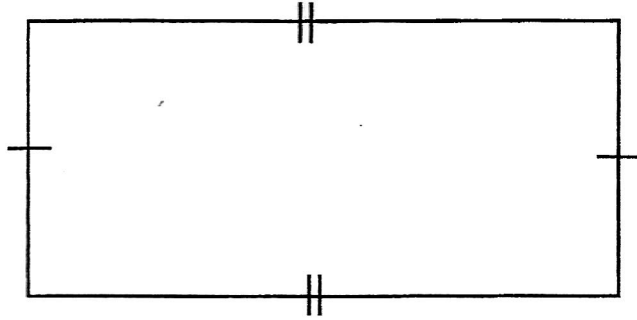
**C** 20.

**D** 10.25.

25 An angle less than  $90^\circ$  is

- A obtuse.
- B acute.
- C reflex.
- D straight.

26



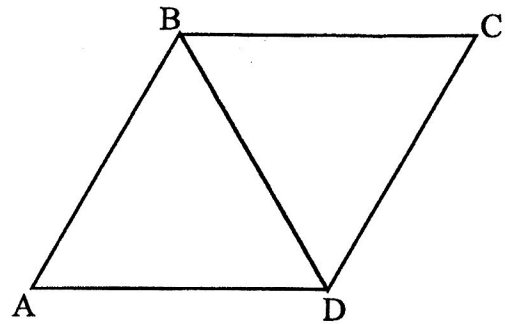
How many lines of symmetry has the shape above?

- A 4
- B 8
- C 1
- D 2

27 Mr Ncube invested \$ 4 000 in a bank. The interest rate was 10 % per annum.

What would be his interest after 5 years?

- A \$ 2 000
- B \$ 6 000
- C \$ 400
- D \$ 2 400



ABCD is a parallelogram. The line parallel to line DC is

- A BC.
- B AD.
- C AB.
- D BD.

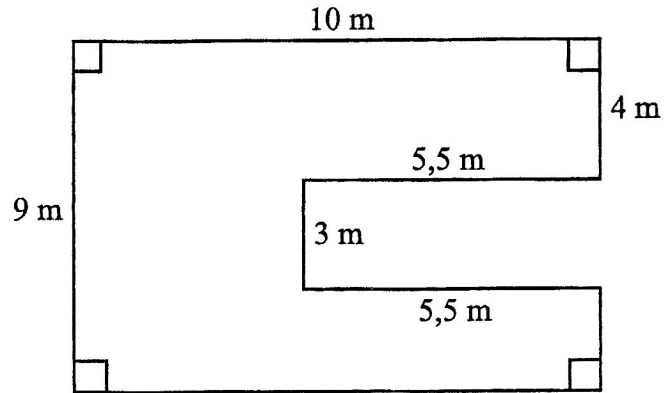
29 The sum of 368 and 976 is

- A 4 656.
- B 1 344.
- C 2 704.
- D 3 556.

30  $36 + 2 - 5 \times 3 =$

- A 95.
- B 37.
- C 23.
- D 109.

- 31 The perimeter of the shape shown below is



- 90 m.  
37 m.  
51 m.  
49 m.
- 32 A group of 4 pupils can take 2 weeks to do a certain job. How long will 12 pupils take to complete the job if they work at the same rate?
- A  $\frac{2}{3}$  days  
B  $4\frac{2}{3}$  days  
C 24 days  
D 8 days
- 33 The table below shows the amount of rainfall recorded in a village over 4 days.

Day	1	2	3	4
Amount of rainfall (mm)	25	32	17	35

The average amount of rainfall recorded over 4 days is

- A 109 mm.  
B 27,25 mm.  
C 27 mm.  
D 35 mm.

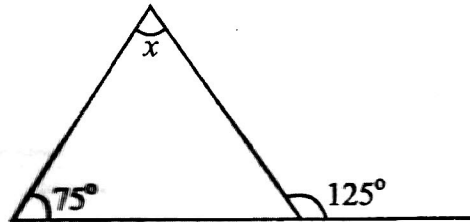
34 The highest common factor (HCF) of 12 and 30 is

- A 60.
- B 2.
- C 6.
- D 360.

35 The net mass of a car is 1 500 kg. The car can carry a load with a maximum mass of 1 000 kg. The gross mass of the car is

- A 2 500 kg.
- B 500 kg.
- C 2 000 kg.
- D 3 500 kg.

36



The size of the angle **marked  $x$**  in the triangle above is

- A  $55^\circ$ .
- B  $200^\circ$ .
- C  $125^\circ$ .
- D  $50^\circ$ .

37  $\frac{3}{5} - \frac{1}{2} =$

- A  $\frac{3}{10}$ .
- B  $\frac{2}{3}$ .
- C  $\frac{1}{10}$ .
- D  $\frac{4}{7}$ .

38  $\left(3\frac{1}{2} + 1\frac{1}{3}\right) \div \frac{1}{6} =$

A  $\frac{29}{36}$ .

B 29.

C 16.

D  $\frac{16}{36}$ .

39 A deposit of \$ 200 was paid for a car marked \$10 000. The balance was paid in 20 equal monthly instalments. How much was paid per month?

A \$ 5.

B \$ 100.

C \$ 400.

D \$ 500.

40 If the difference between 10 and 6 is added to their product, the result is

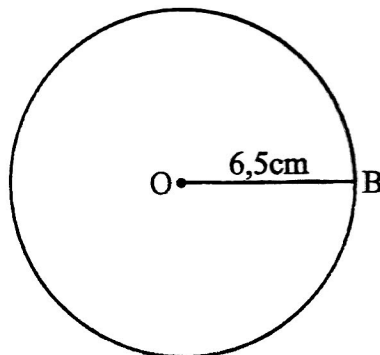
A 76.

B 20.

C 56.

D 64.

41



The diagram is a circle with centre O. Line OB is the radius. What is the **diameter**?

A 6,5 cm.

B 12,5 cm.

C 13 cm.

D 26 cm.

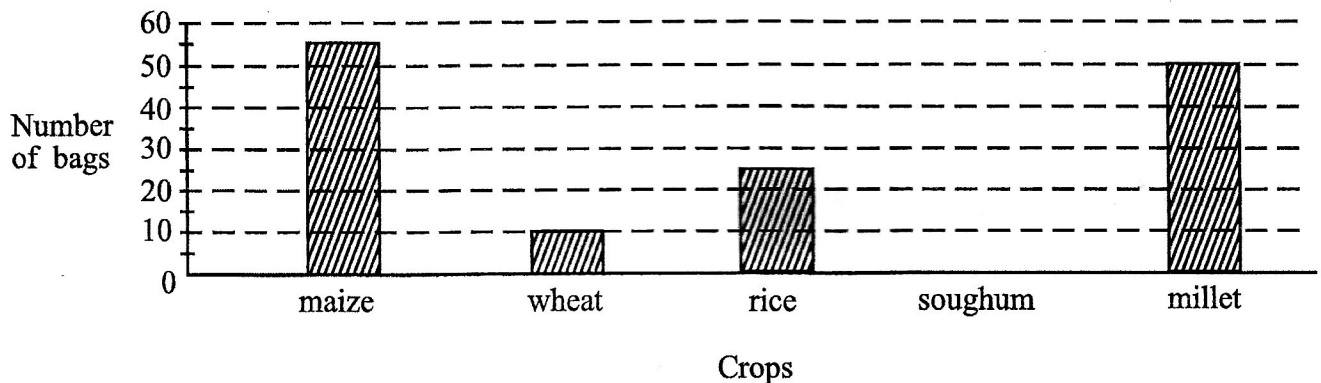
- 42 Mrs Moyo gets a commission of 5 % on every item she sells. She sold items worth \$ 2 000. Her commission is

A \$ 100.  
 B \$ 2 100.  
 C \$ 1 900.  
 D \$ 105.

- 43 A vendor was given 15 % discount on a carpet which cost \$ 4 500. How much did she pay?

A \$ 300.  
 B \$ 675.  
 C \$ 3 825.  
 D \$ 4 485.

The graph below shows the number of bags of different crops harvested at a farm. Use the graph to answer questions 44; 45 and 46.



- 44 The most common crop grown at the farm is

A sorghum.  
 B maize.  
 C millet.  
 D rice.

- 45 The total number of bags of all crops harvested at the farm is

A 150.  
 B 105.  
 C 60.  
 D 140.

46 What is the average number of bags per crop harvested at the farm?

- A 28.
- B 35.
- C 140.
- D 30.

47 If 200 kg is decreased by 20 %, the result is

- A 40 kg.
- B 160 kg.
- C 240 kg.
- D 180 kg.

48 What is  $3\frac{3}{4}$  as a decimal?

- A 0,375.
- B 37,5.
- C 3,75.
- D 0,75.

49  $\frac{2}{3} \div \frac{5}{6} =$

- A  $\frac{2}{5}$ .
- B  $\frac{1}{2}$ .
- C  $\frac{5}{9}$ .
- D  $\frac{4}{5}$ .

**50** A shopkeeper bought groceries for \$ 1 500 and sold them for \$ 2 000. What was the shopkeeper's percentage profit?

**A**  $33\frac{1}{3}\%$ .

**B** 25 %.

**C** 60 %.

**D** 33 %.



**ZIMBABWE SCHOOL EXAMINATIONS COUNCIL**  
**GRADE SEVEN EXAMINATION**

**MATHEMATICS**

**002/2**

**PAPER 2**

**OCTOBER 2014 SESSION**

**Time: 2 hours**

**INSTRUCTIONS TO CANDIDATES**

1. Answer **all** questions in Section A.
2. Answer any **three** questions in Section B.
3. Section A carries 25 marks.
4. Section B carries 15 marks.
5. To obtain full marks for any question, **all working** must be shown.
6. Do **not** measure from given diagrams.
7. Electronic calculators and slide rules **must not** be used in the examination.
8. **Underline** answers and rule off after each answer.

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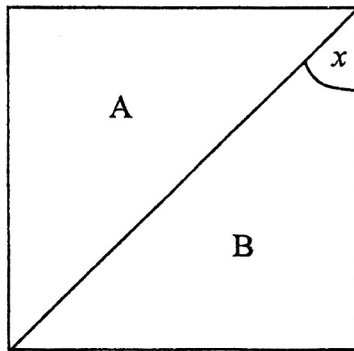
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**Section A (25 marks)**

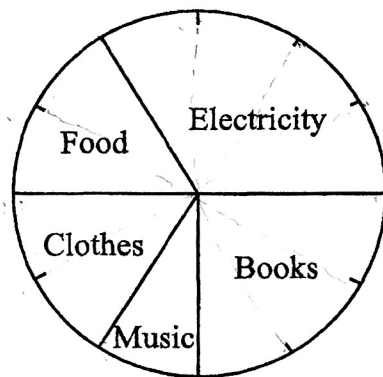
*Answer all questions in this section.*

- 1 (a) Write the number 801 008 in words. (1)
- (b) Change 0,25 to a common fraction in its lowest terms. (2)
- 2 (a) Express  $20 \div 3$  correct to 2 decimal places. (2)
- (b) A lorry loaded with riversand weighs 13 tonnes. When empty the lorry weighs 7 215 kg.
- Calculate the mass of the load in tonnes. (3)
- 3 Write down the date, 2 October 1984 in Standard International [S.I] Notation. (1)
- 4 The figure below is a square. Triangles **A** and **B** are equal.



- (a) What special name is given to triangle **A**. (1)
- (b) Calculate the angle marked  $x$ . (2)
- 5 (a) Evaluate  $6,4 \div 0,08$  (2)
- (b) Simplify  $\frac{1}{10} - \frac{1}{5} + \frac{1}{2}$  (2)

- 6 Express 72 as a product of its prime factors (2)
- 7 Find the number of small boxes measuring 2 cm by 3 cm by 5 cm that can fit into a large box measuring 6 cm by 12 cm by 20 cm. (3)
- 8



The diagram above shows how Justin spent \$ 48.00.

Use it to answer the following questions.

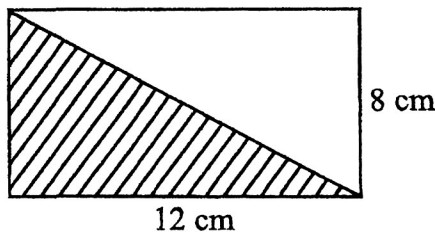
- (a) State the name of the diagram above. (1)
- (b) Calculate the amount Justin spent on books. (3)

### Section B (15 marks)

Answer any *three* questions from this section.

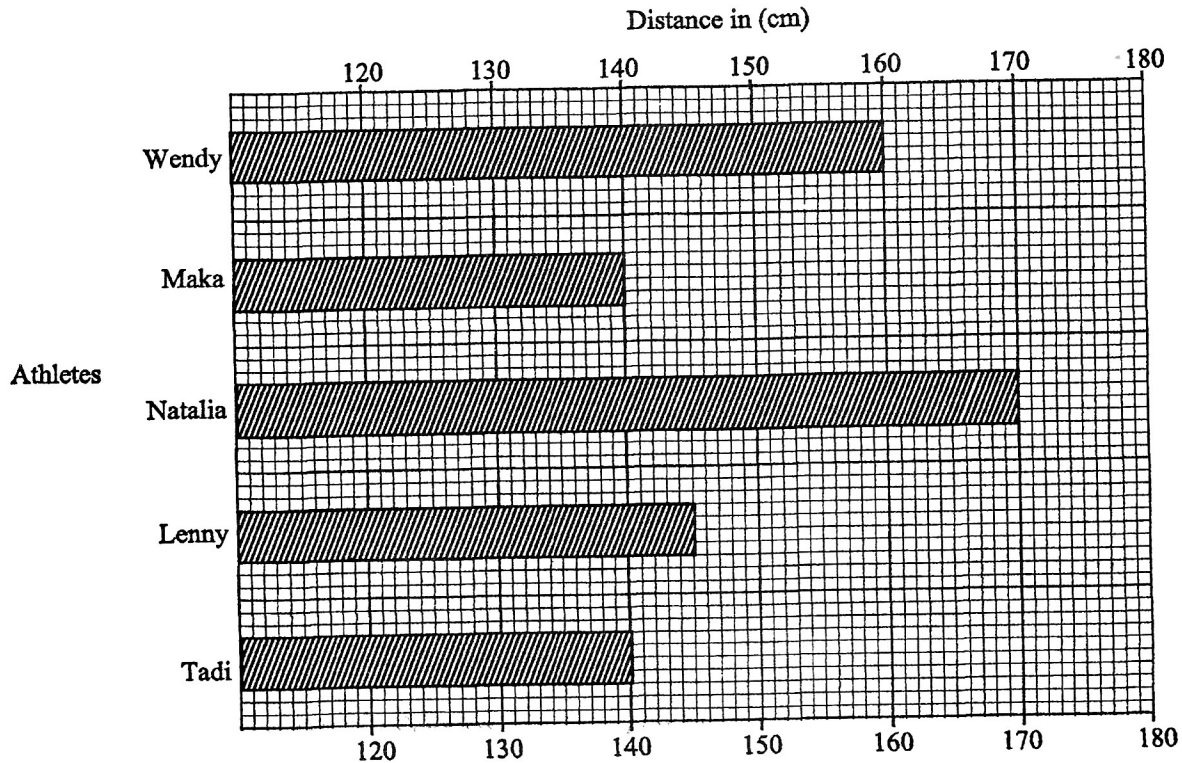
- 9 (a) State the number of lines of symmetry of a rectangle. (1)

The shape below is a rectangle measuring 12 cm by 8 cm.



- (b) Calculate the area of the shaded part. (2)
- (c) Find the perimeter of the whole shape. (2)

- 10 The graph shows distances jumped by five athletes in a competition.



- (a) Name the best athlete. (1)
- (b) Find the total distance jumped by Natalia and Lenny. (2)
- (c) Name the athletes who jumped more than 145 cm. (2)
- 11 Kendy, Nyasha and Sipho contributed \$ 120, \$ 180 and \$ 200 respectively for a business. They invested their money and earned \$ 75 interest after a year.
- (a) Express their contributions as a ratio in its simplest form. (2)
- (b) Find Nyasha's share on their interest. (2)
- (c) How much did Sipho contribute? (1)
- 12 (a) 12 men build a house in 20 days.  
How long will 8 men take to build the same house? (2)
- (b) Nomusa is facing East. She turns  $2\frac{1}{2}$  right angles in an anti-clockwise direction. Which direction is she facing now? (2)

- (c) How many degrees make a straight angle? (1)

- 13 Use the timetable for a bus travelling from Harare to Masvingo to answer questions that follow.

HARARE	DEP	0700
CHIVHU	ARR DEP	0925 0946
MVUMA	ARR DEP	1026 1039
MASVINGO	ARR DEP	1300

- (a) Find the stoppage time in Mvuma. (2)
- (b) If the distance from Harare to Masvingo is 300 km, calculate the average speed of the bus. (3)



**ZIMBABWE SCHOOL EXAMINATIONS COUNCIL**  
**GRADE SEVEN EXAMINATION**

**MATHEMATICS**  
**PAPER 1**

**002/1**

**OCTOBER 2014 SESSION**

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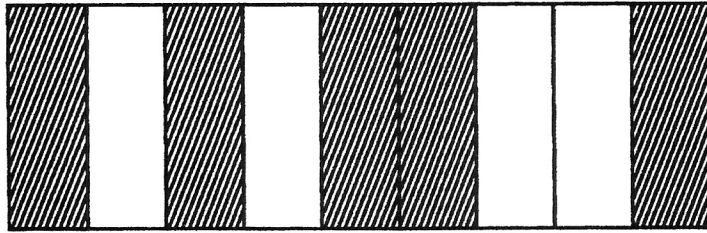
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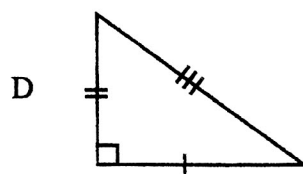
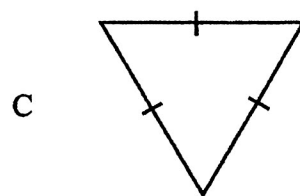
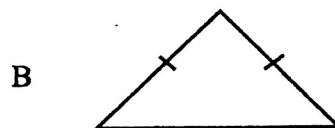
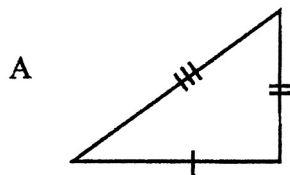
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- A  $\frac{1}{2}$ ;  $\frac{2}{5}$  and  $\frac{1}{3}$ .
- B  $\frac{1}{3}$ ;  $\frac{2}{5}$  and  $\frac{1}{2}$ .
- C  $\frac{2}{5}$ ;  $\frac{1}{2}$  and  $\frac{1}{3}$ .
- D  $\frac{1}{2}$ ;  $\frac{1}{3}$  and  $\frac{2}{5}$ .

- 11 The missing fraction in the pattern  $\frac{5}{6}$ ;  $\square$ ;  $\frac{3}{4}$ ;  $\frac{2}{3}$ ;  $\frac{1}{2}$  is

- A  $\frac{4}{5}$ .
- B  $\frac{1}{5}$ .
- C  $\frac{3}{5}$ .
- D  $\frac{4}{6}$ .

12 Which of the following triangles is an equilateral?



13 A farmer has fifty animals. Twenty of them are cattle, eighteen are sheep and the rest are goats. The number of goats expressed as a percentage of the total number of animals is

- A 76 %.
- B 40 %.
- C 18 %.
- D 24 %.

14 A mass of 250 grammes expressed in kilogrammes is

- A 0,025.
- B 0,25.
- C 2,5.
- D 25.

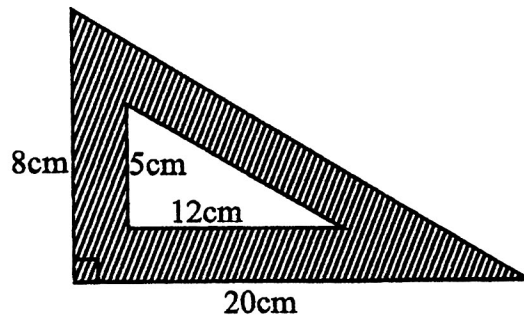
15 The time 0018 hours expressed in ordinary time is

- A 18 minutes past 12 in the afternoon.
- B 18 minutes to 12 in the morning.
- C 18 minutes past 12 mid night.
- D 18 minutes to 12 mid night.

[Turn over

- 16 A cyclist covered a distance of 30 km in 45 minutes. The average speed of the cyclist was
- A 40 km/hr.
  - B 22,5 km/hr.
  - C 0,66 km/hr.
  - D 1,5 km/hr.

17



The area of the shaded part in the diagram is

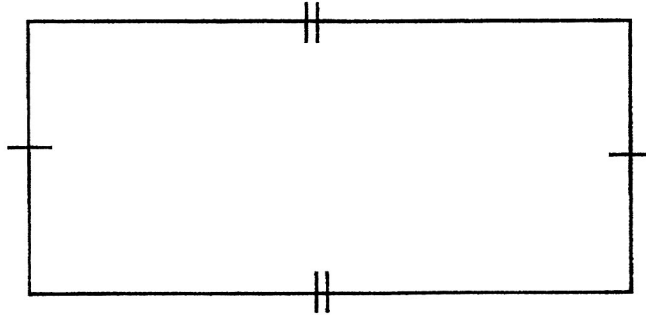
- A  $80 \text{ cm}^2$ .
  - B  $30 \text{ cm}^2$ .
  - C  $50 \text{ cm}^2$ .
  - D  $110 \text{ cm}^2$ .
- 18 Jane, Peter and Alice shared \$ 200 in the ratio 2:3:5 respectively. How much did Peter get?
- A \$ 40.
  - B \$ 100.
  - C \$ 140.
  - D \$ 60.
- 19 The cost of 15 m of cloth at \$ 5,50 per metre is
- A \$ 70,50.
  - B \$ 82,50.
  - C \$ 80,50.
  - D \$ 72,50.

- 20  $1\frac{3}{4} - \frac{5}{6} + \frac{1}{3} =$
- A  $1\frac{1}{3}$ .
- B  $1\frac{4}{5}$ .
- C  $1\frac{1}{4}$ .
- D  $\frac{4}{5}$ .
- 21 A rectangular water tank measures 8 m by 6 m by 3 m. Its volume in  $\text{m}^3$  is
- A 144  $\text{m}^3$ .
- B 17  $\text{m}^3$ .
- C 34  $\text{m}^3$ .
- D 124  $\text{m}^3$ .
- 22  $\frac{3}{4}$  of a day expressed in hours is
- A 18 hours.
- B 75 hours.
- C 36 hours.
- D 9 hours.
- 23 The capacity of a car tank is 80 litres. When the tank is 40 % full, the amount of petrol is
- A 200 litres.
- B 48 litres.
- C 112 litres.
- D 32 litres.
- 24  $20,50 + 0,5 =$
- A 20,10.
- B 41.
- C 20.
- D 10,25.

25 An angle less than  $90^\circ$  is

- A obtuse.
- B acute.
- C reflex.
- D straight.

26



How many lines of symmetry has the shape above?

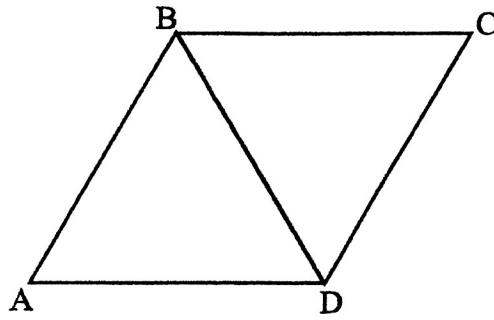
- A 4
- B 8
- C 1
- D 2

27 Mr Ncube invested \$ 4 000 in a bank. The interest rate was 10 % per annum.

What would be his interest after 5 years?

- A \$ 2 000
- B \$ 6 000
- C \$ 400
- D \$ 2 400

28



ABCD is a parallelogram. The line parallel to line DC is

- A BC.
- B AD.
- C AB.
- D BD.

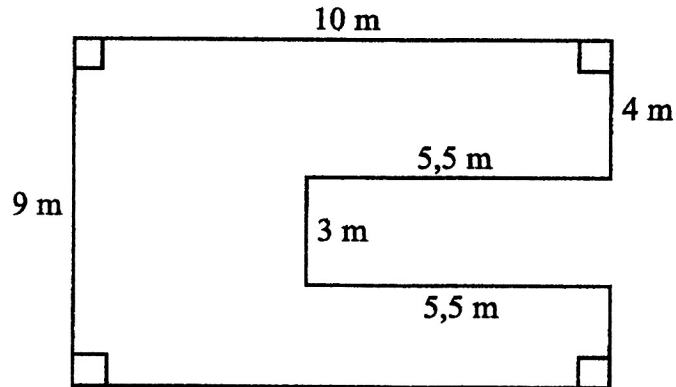
29 The sum of 368 and 976 is

- A 4 656.
- B 1 344.
- C 2 704.
- D 3 556.

30  $36 + 2 - 5 \times 3 =$

- A 95.
- B 37.
- C 23.
- D 109.

- 31 The perimeter of the shape shown below is



- A 90 m.  
 B 37 m.  
 C 51 m.  
 D 49 m.
- 32 A group of 4 pupils can take 2 weeks to do a certain job. How long will 12 pupils take to complete the job if they work at the same rate?
- A  $\frac{2}{3}$  days  
 B  $4\frac{2}{3}$  days  
 C 24 days  
 D 8 days
- 33 The table below shows the amount of rainfall recorded in a village over 4 days.

Day	1	2	3	4
Amount of rainfall (mm)	25	32	17	35

The average amount of rainfall recorded over 4 days is

- A 109 mm.  
 B 27,25 mm.  
 C 27 mm.  
 D 35 mm.

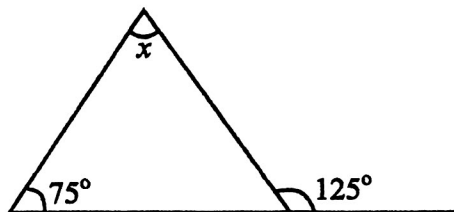
34 The highest common factor (HCF) of 12 and 30 is

- A 60.
- B 2.
- C 6.
- D 360.

35 The net mass of a car is 1 500 kg. The car can carry a load with a maximum mass of 1 000 kg. The gross mass of the car is

- A 2 500 kg.
- B 500 kg.
- C 2 000 kg.
- D 3 500 kg.

36



The size of the angle marked  $x$  in the triangle above is

- A  $55^\circ$ .
- B  $200^\circ$ .
- C  $125^\circ$ .
- D  $50^\circ$ .

37  $\frac{3}{5} - \frac{1}{2} =$

- A  $\frac{3}{10}$ .
- B  $\frac{2}{3}$ .
- C  $\frac{1}{10}$ .
- D  $\frac{4}{7}$ .

[Turn over

38  $\left(3\frac{1}{2} + 1\frac{1}{3}\right) + \frac{1}{6} =$

A  $\frac{29}{36}$ .

B 29.

C 16.

D  $\frac{16}{36}$ .

39 A deposit of \$ 200 was paid for a car marked \$10 000. The balance was paid in 20 equal monthly instalments. How much was paid per month?

A \$ 5.

B \$ 100.

C \$ 400.

D \$ 500.

40 If the difference between 10 and 6 is added to their product, the result is

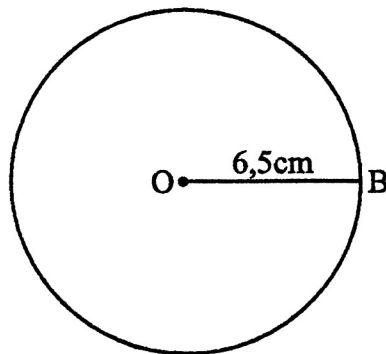
A 76.

B 20.

C 56.

D 64.

41



The diagram is a circle with centre O. Line OB is the radius. What is the diameter?

A 6,5 cm.

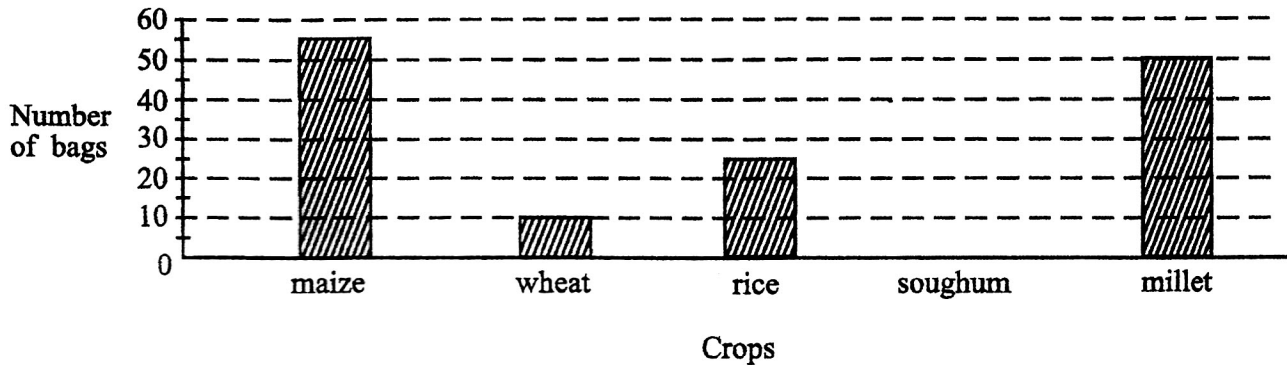
B 12,5 cm.

C 13 cm.

D 26 cm.

- 42 Mrs Moyo gets a commission of 5 % on every item she sells. She sold items worth \$ 2 000. Her commission is
- A \$ 100.  
 B \$ 2 100.  
 C \$ 1 900.  
 D \$ 105.
- 43 A vendor was given 15 % discount on a carpet which cost \$ 4 500. How much did she pay?
- A \$ 300.  
 B \$ 675.  
 C \$ 3 825.  
 D \$ 4 485.

The graph below shows the number of bags of different crops harvested at a farm. Use the graph to answer questions 44; 45 and 46.



- 44 The most common crop grown at the farm is
- A sorghum.  
 B maize.  
 C millet.  
 D rice.
- 45 The total number of bags of all crops harvested at the farm is
- A 150.  
 B 105.  
 C 60.  
 D 140.

- 46 What is the average number of bags per crop harvested at the farm?
- A 28.
  - B 35.
  - C 140.
  - D 30.
- 47 If 200 kg is decreased by 20 %, the result is
- A 40 kg.
  - B 160 kg.
  - C 240 kg.
  - D 180 kg.
- 48 What is  $3\frac{3}{4}$  as a decimal?
- A 0,375.
  - B 37,5.
  - C 3,75.
  - D 0,75.
- 49  $\frac{2}{3} + \frac{5}{6} =$
- A  $\frac{2}{5}$ .
  - B  $\frac{1}{2}$ .
  - C  $\frac{5}{9}$ .
  - D  $\frac{4}{5}$ .

**50** A shopkeeper bought groceries for \$ 1 500 and sold them for \$ 2 000. What was the shopkeeper's percentage profit?

**A**  $33\frac{1}{3}\%$ .

**B** 25 %.

**C** 60 %.

**D** 33 %.



**ZIMBABWE SCHOOL EXAMINATIONS COUNCIL**  
**GRADE SEVEN EXAMINATION**

**MATHEMATICS**  
**PAPER 2**

**002/2**

**OCTOBER 2015 SESSION**

**Time: 2 hours**

**INSTRUCTIONS TO CANDIDATES**

1. Answer **all** questions in Section A.
2. Answer any **three** questions in Section B.
3. Section A carries 25 marks.
4. Section B carries 15 marks.
5. To obtain full marks for any question, **all working** must be shown.
6. Do **not** measure from given diagrams.
7. Electronic calculators and slide rules **must not** be used in the examination.
8. **Underline** answers and rule off after each answer.

---

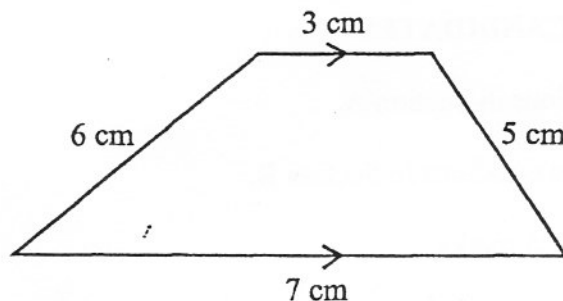
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## Section A (25 marks)

Answer all questions in this section.

1. Write down 500 in Roman numerals. [1]
2. (a) Increase 57 by 43. [2]
- (b) Find the value of  $0,4 \times 0,02$ . [2]
- (c) Simplify  $\frac{3}{4} + \frac{3}{8}$ . [2]
3. Express half past twelve midnight in 24 hour notation. [1]
- 4.



- (a) Name the shape above. [1]
- (b) State the number of dimensions of the shape. [1]
- (c) Calculate the perimeter of the shape. [2]
5. Find the lowest common multiple (L.C.M) of 6 and 9. [2]
6. Find the value of  $2^5$ . [2]
7. Mr Moyo had 80 animals on his farm. 25% of them were goats, 50% were sheep and the rest were donkeys.
  - (a) Find the number of sheep and goats. [3]
  - (b) Express the number of donkeys as a proper fraction of the 80 animals in its lowest terms. [2]
8. Tendai bought a hoe at \$4,60, a suitcase at \$6,70 and a shirt at \$10,30.
  - (a) Find how much Tendai paid altogether. [2]
  - (b) Calculate the change she got from a \$50 note. [2]

## Section B (15 marks)

Answer any *three* questions in this section.

9. Sam wrote a test after a fortnight and got 84 marks out of 120.

- (a) Find the number of days in a fortnight. [1]
- (b) Express Sam's mark as a percentage. [2]
- (c) Express Sam's mark as a fraction of the total in its lowest terms. [2]

10. The table shows dates of birth for three children.

Linda	Rufaro	Cynthia
21-10-1982	11-06-1969	24-04-1976

- (a) Name the eldest child. [1]
- (b) From the table, state the leap year. [2]
- (c) Find Cynthia's age in 1992. [2]

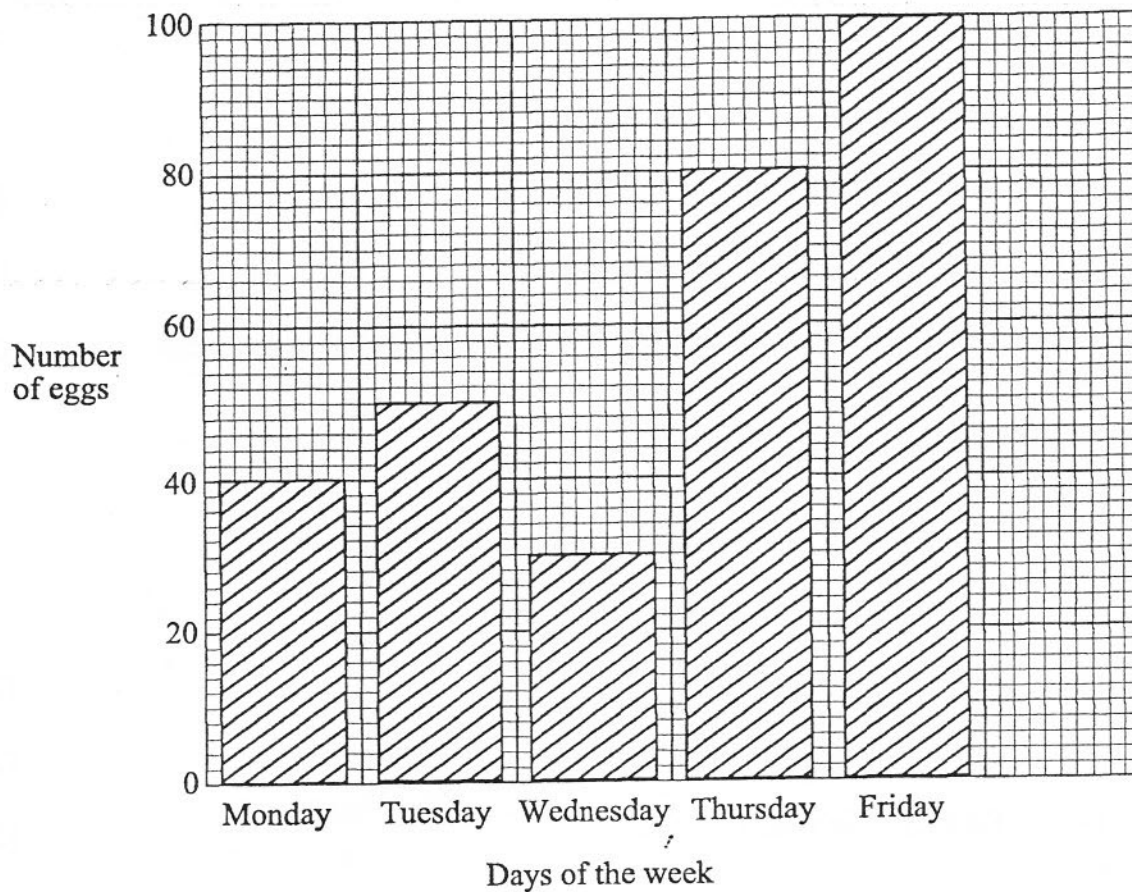
11. John and Jane contributed \$200,00 and \$300,00 respectively to start a business.

- (a) Express Jane's contribution to John's as a ratio in its simplest form. [2]
- (b) They made a profit of \$150,00 and shared it according to the ratio of their contribution.  
Calculate Jane's share. [3]

12. Mr Mpofo's rectangular plot is 400 m by 300 m.

- (a) Calculate the perimeter of the plot. [2]
- (b) What is the area of his plot in hectares? [3]

13. The graph shows the number of eggs laid by hens in five days.



- (a) State the day the least number of eggs were laid. [1]
- (b) Find the difference between the number of eggs laid on Friday and Tuesday. [2]
- (c) The total number of eggs laid during the 5 days was 300. Calculate the daily average number of eggs laid. [2]



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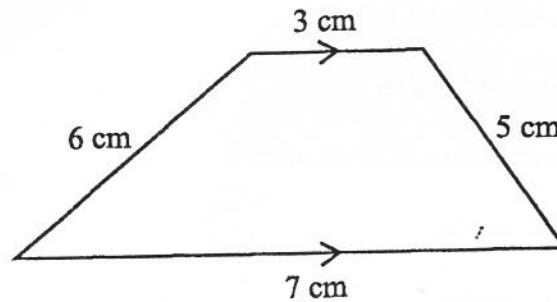
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## Section A (25 marks)

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- (b) Find the value of  $0,4 \times 0,02$ . [2]
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3. Express half past twelve midnight in 24 hour notation. [1]
- 4.



- (a) Name the shape above. [1]
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  - (a) Find how much Tendai paid altogether. [2]
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## Section B (15 marks)

Answer any *three* questions in this section.

9. Sam wrote a test after a fortnight and got 84 marks out of 120.

- (a) Find the number of days in a fortnight. [1]
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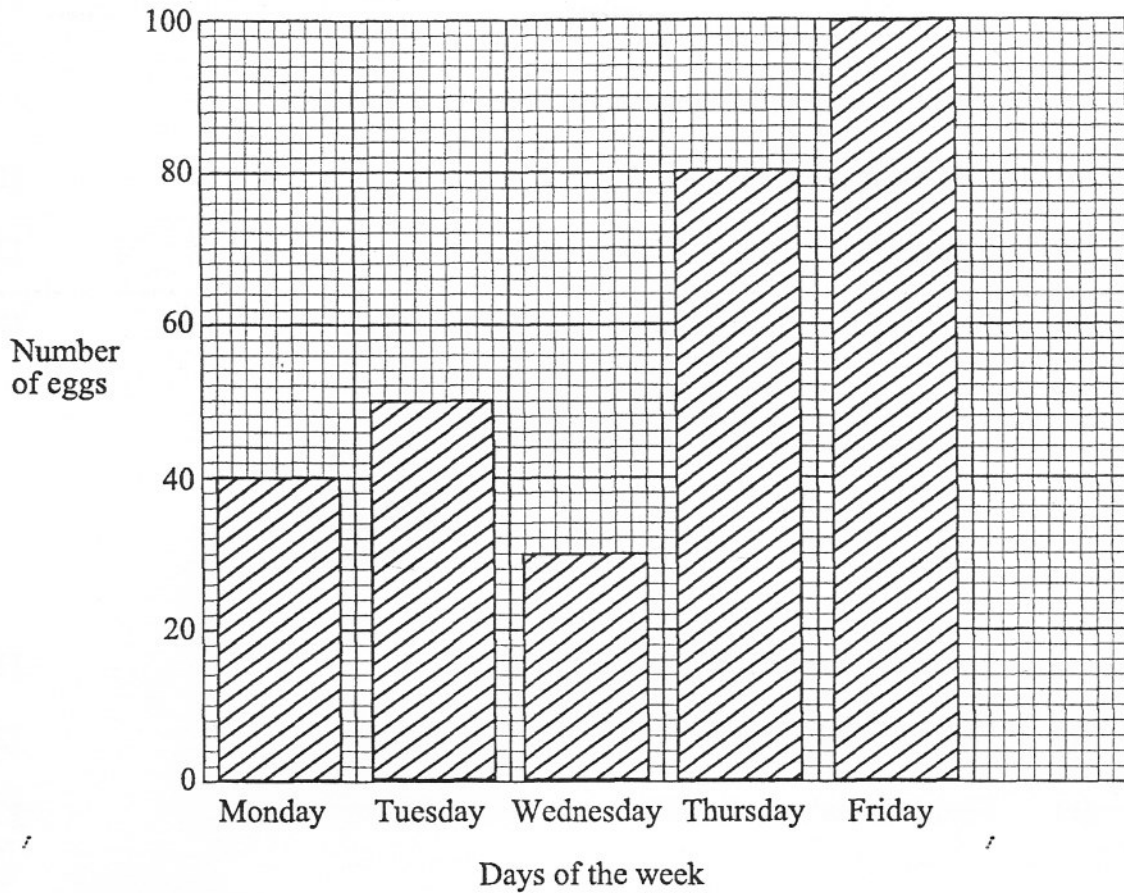
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- (b) What is the area of his plot in hectares? [3]

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- (a) State the day the least number of eggs were laid. [1]
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- (c) The total number of eggs laid during the 5 days was 300. Calculate the daily average number of eggs laid. [2]



**ZIMBABWE SCHOOL EXAMINATIONS COUNCIL**  
**GRADE SEVEN EXAMINATION**

**MATHEMATICS**  
**PAPER 1**

**002/1**

**OCTOBER 2015 SESSION**

**Time: 2 hours**

**INSTRUCTIONS TO CANDIDATES**

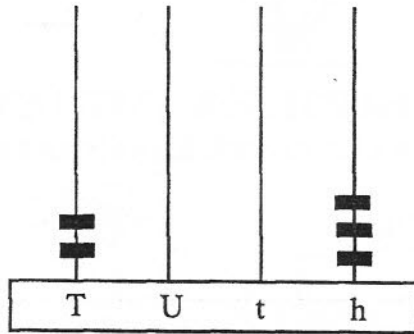
1. Read **all** the instructions carefully.
2. **Do not** open this booklet until you are told to do so by the invigilator.
3. Use only an HB pencil for all entries on the answer sheet.
4. When you are told to start, choose **one** correct answer from the suggested answers and shade it **very dark** as shown in the examples at the top of the answer sheet.
5. If you wish to change your answer, **erase it completely** with a pencil rubber and then shade the new choice.
6. If **more than one** box is shaded for any one answer, that answer will be regarded as **wrong**.
7. **If you do not understand** the instructions, **ask** the invigilator to explain them to you **before you start**.
8. Answer **all** the questions on the separate answer sheet provided.
9. Rough paper will be provided.

---

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1



The number shown on the abacus above is

- A 2,003.
  - B 20,03.
  - C 200,3.
  - D 2003.
- 2 Which of the following is a square number?
- A 3
  - B 5
  - C 9
  - D 12
- 3 The missing number in the number pattern 3, 6, 9, 12, 15, □, 21, 24 is
- A 17.
  - B 20.
  - C 19.
  - D 18.
- 4 0,7 as a percentage is
- A 7.
  - B 70.
  - C 0,7.
  - D 70,7.
- 5 A mass of 8,007 kg expressed in grammes is
- A 80,07.
  - B 8007.
  - C 800,7.
  - D 80070.

6 11.30 am in 24 hour notation is

- A 2330.
- B 1230.
- C 1130.
- D 1100.

7  $\frac{9}{12}$  in its lowest terms is

- A  $\frac{3}{4}$ .
- B  $\frac{18}{24}$ .
- C  $\frac{4}{3}$ .
- D  $\frac{3}{6}$ .

8  $1\frac{1}{2} + 3\frac{1}{3} =$

- A  $4\frac{2}{5}$
- B  $4\frac{1}{6}$
- C  $4\frac{1}{5}$
- D  $4\frac{5}{6}$

9 12,86 + 0,7 correct to one decimal place is

- A 14,00.
- B 14,6.
- C 13,6.
- D 13,56.

10 3007 cents in dollars is

- A \$3,70.
- B \$30,07.
- C \$3,07.
- D \$300,70.

11 How many sides has a hexagon?

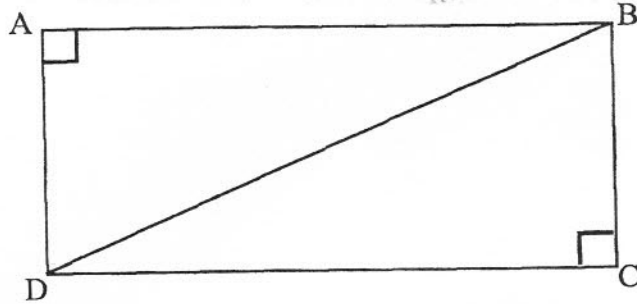
- A 5
- B 6
- C 7
- D 8

[Turn over

- 12 A pair of shoes is marked \$25,00. If 5% discount is offered for cash, then the discount price for the shoes is

A \$23,75.  
 B \$26,25.  
 C \$ 1,25.  
 D \$20,00.

13



Line BD is

A a diagonal.  
 B a length.  
 C a width.  
 D a height.

14  $0,3 \times 0,3 \times 0,3 =$

A 0,027.  
 B 0,270.  
 C 2,700.  
 D 27,000.

15  $8 - 10 + 7 =$

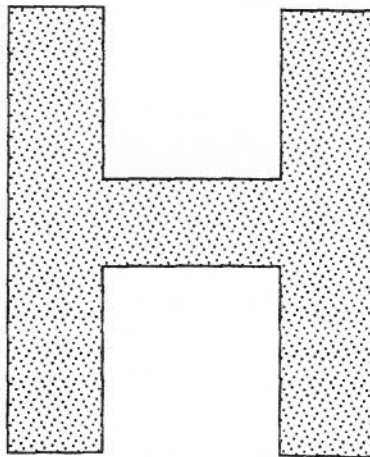
A 5.  
 B 9.  
 C 11.  
 D 25.

16 If  $4,2 \div 0,007 = 600$ , then  $4,2 \div 0,07$  is

A 6.  
 B 60.  
 C 600.  
 D 6000.

- 17 Rutendo is facing North. She turns through  $2\frac{1}{2}$  right angles in the clockwise direction. She is now facing
- A South east.
  - B North east.
  - C North west.
  - D South west.
- 18 If 524 is increased by 79, then the result is
- A 445.
  - B 545.
  - C 593.
  - D 603.
- 19 A shopkeeper bought an article for \$16,00 and sold it for \$20,00. His percentage profit was
- A 40%.
  - B 20%.
  - C 80%.
  - D 25%.
- 20  $4\frac{3}{4} - \frac{5}{6} + 1\frac{1}{4} =$
- A  $2\frac{2}{3}$ .
  - B  $3\frac{11}{12}$ .
  - C  $5\frac{1}{6}$ .
  - D  $5\frac{1}{4}$ .

21

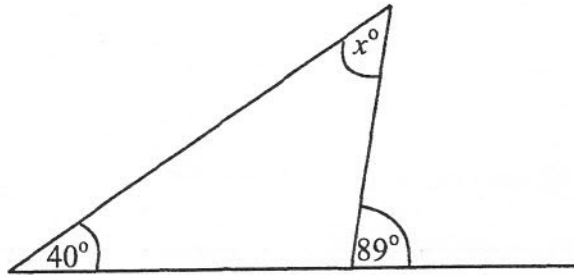


How many lines of symmetry does this shape have?

- A 1
- B 2
- C 3
- D 4

[Turn over

22



The size of the angle marked  $x$  in the triangle above is

- A  $49^\circ$ .
- B  $91^\circ$ .
- C  $140^\circ$ .
- D  $89^\circ$ .

23  $405 - 299 =$

- A 216
- B 204
- C 206
- D 106

24  $4\frac{1}{2}$  tonnes in kilogrammes is

- A 405.
- B 450.
- C 4050.
- D 4500.

25  $3,09 + 1,2 =$

- A 2,89
- B 2,97
- C 4,29
- D 3,21

26  $1\frac{1}{4} - \frac{3}{5} \times 2 =$

- A  $\frac{1}{20}$ .
- B  $\frac{13}{20}$ .
- C  $1\frac{3}{10}$ .
- D  $1\frac{9}{10}$ .

27 Four boys shared 428 sweets equally. Each boy got

- A 17.
- B 102.
- C 104.
- D 107.

28  $\frac{1}{2} + \frac{1}{4} =$

- A  $\frac{1}{3}$ .
- B 8.
- C  $\frac{1}{8}$ .
- D 2.

29 Chido had \$5,00. It was made up of 50c coins. How many 50c coins did he have?

- A 4
- B 5
- C 8
- D 10

30 Mr Nyoni's account had \$500. He deposited \$350 and withdrew \$475. His new balance is

- A \$375
- B \$625
- C \$825
- D \$850

31 How many 3 cm cubes will exactly fit in a box measuring 12 cm by 9 cm by 6 cm?

- A 24
- B 27
- C 72
- D 162

32 In a class there are 45 pupils. If  $\frac{4}{9}$  of them are boys, the number of girls in the class is

- A 5.
- B 20.
- C 25.
- D 41.

[Turn over

33  $7^2$  is the same as

- A  $7 \times 2.$
- B  $7 \times 7.$
- C  $7 + 7.$
- D  $7 + 2.$

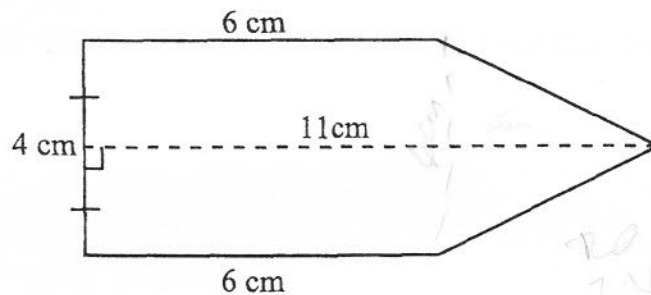
34 An angle of  $90^\circ$  is

- A an acute angle.
- B a right angle.
- C an obtuse angle.
- D a reflex angle.

35 A motorist crossed a bridge 25 metres long in  $1\frac{1}{2}$  seconds. His average speed in km/h was

- A 50.
- B 60.
- C 100.
- D 120.

36



What is the area of the shape above?

- A  $34 \text{ cm}^2.$
- B  $44 \text{ cm}^2.$
- C  $66 \text{ cm}^2.$
- D  $264 \text{ cm}^2.$

37 A motorist takes 2 hours 15 minutes to complete a journey. If the motorist's average speed is 72 km/h, how long was the journey?

- A 32 km
- B 144 km
- C 162 km
- D 180 km

$$\begin{array}{r}
 2\frac{15}{60} \times 72 \\
 2 \times 72 \\
 \hline
 144 \\
 + 18 \\
 \hline
 162
 \end{array}$$

7  
162

- 38 A police officer was on duty from 10.45 pm to 7.30 am the following day. For how long was the police officer on duty?
- A 3 hours 15 minutes.
  - B 7 hours 45 minutes.
  - C 8 hours 45 minutes.
  - D 18 hours 15 minutes.
- 39 A vendor sells goods at 5% commission. How much commission does the vendor get after selling goods worth \$150?
- A \$157,50
  - B \$3,00
  - C \$142,50
  - D \$7,50
- 40 Masimba and Tendai shared \$60 such that Tendai got \$10 more than Masimba. Masimba got
- A \$25,00.
  - B \$30,00.
  - C \$35,00.
  - D \$50,00.
- 41 In 2010, Thabo was twice as old as Nomusa. If in 2012 Nomusa was 5 years old, then in 2012 Thabo was aged
- A 4.
  - B 8.
  - C 10.
  - D 12.
- 42 Mr Banda's rectangular garden measures 12 metres by 8 metres. He fenced it putting a pole after every metre. How many poles did he use to fence the garden?
- A 20
  - B 96
  - C 39
  - D 40
- 43 Two adults and a child shared \$60 such that each adult got an equal amount and the child half as much. The child got
- A \$12,00.
  - B \$20,00.
  - C \$24,00.
  - D \$30,00.

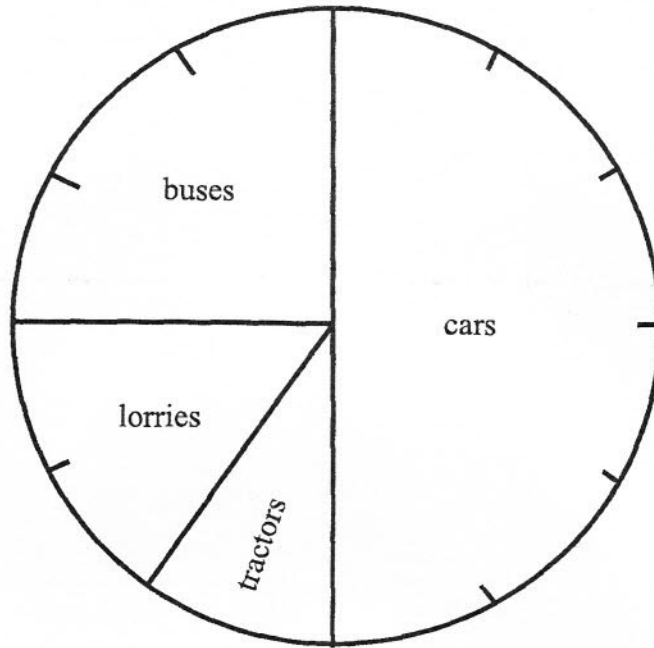
- 44 \$1000 is invested in a bank for  $5\frac{1}{2}$  years. If simple interest is earned at a rate of 10% per year, then the total amount after  $5\frac{1}{2}$  years is
- A \$450.  
 B \$550.  
 C \$1250.  
 D \$1550.
- 45 A rectangle has a perimeter of 30 cm. The ratio of its length to width is 3:2. The area of the rectangle is
- A  $54 \text{ cm}^2$ .  
 B  $60 \text{ cm}^2$ .  
 C  $108 \text{ cm}^2$ .  
 D  $150 \text{ cm}^2$ .
- 46 10 tractors take 8 days to plough a field. How long will it take 16 tractors to do the same job?
- A  $3\frac{1}{4}$  days  
 B 5 days  
 C  $12\frac{4}{5}$  days  
 D 20 days
- 47 The cash price of a bicycle is \$800. If it is bought under hire purchase, a deposit of 30% of the cash price and 12 monthly instalments of \$100,00 is paid. The hire purchase price is
- A \$240.  
 B \$960.  
 C \$1200.  
 D \$1440.
- 48 The table shows the distance (in km) between business centres A, B, C, D and E.

	A				
	12				
		B			
	16	4			
			C		
	24	12	8		
				D	
	31	19	17	9	
					E

The distance between C and E is

- A 8km.  
 B 9km.  
 C 17km.  
 D 19km.

- 49 The pie chart shows the vehicles that passed through a business centre in an hour.



If 384 vehicles passed through the business centre, the number of buses that passed through was

- A 32.
  - B 64.
  - C 96.
  - D 192.
- 50 If the diameter of a circle is 7 cm, then its radius is
- A 3,5 cm.
  - B 24,5 cm.
  - C 14 cm.
  - D 49 cm.



**ZIMBABWE SCHOOL EXAMINATIONS COUNCIL**  
**GRADE SEVEN EXAMINATION**

**MATHEMATICS**  
**PAPER 1**

**002/1**

**OCTOBER 2016 SESSION**

**Time: 2 hours**

**INSTRUCTIONS TO CANDIDATES**

1. Read **all** the instructions carefully.
2. **Do not** open this booklet until you are told to do so by the invigilator.
3. Use only an HB pencil for all entries on the answer sheet.
4. When you are told to start, choose **one** correct answer from the suggested answers and shade it **very dark** as shown in the examples at the top of the answer sheet.
5. If you wish to change your answer, **erase it completely** with a pencil rubber and then shade the new choice.
6. If **more than one** box is shaded for any question, that answer will be regarded as **wrong**.
7. **If you do not understand** the instructions, **ask** the invigilator to explain them to you **before you start**.
8. Answer **all** the questions on the separate answer sheet provided.
9. Rough paper will be provided.

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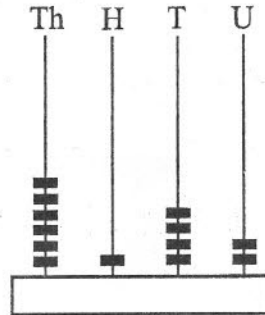
**This question paper consists of 11 printed pages and 1 blank page.**

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1. Seventy thousand and eighty in figures is

- A. 7 008.
- B. 70 008.
- C. 70 080.
- D. 78 000.

2. The number shown on the abacus below is



- A. 6142.
- B. 4612.
- C. 2416.
- D. 6140.

3.  $(10^1 \times 4) + (10^5 \times 6) + (10^3 \times 3) + (10^6 \times 9) =$

- A. 4 639
- B. 9 643.
- C. 46 390.
- D. 9 603 040.

4. Round off 249 999 to the nearest hundred.

- A. 250 000.
- B. 240 000.
- C. 260 000.
- D. 200 000.

5. 25, 59 to the nearest whole number is

- A. 26, 6.
- B. 26.
- C. 25, 6.
- D. 25.

6.  $7\frac{3}{4}$  as an improper fraction is

A.  $\frac{21}{4}$ .

B.  $\frac{25}{4}$ .

C.  $\frac{28}{4}$ .

D.  $\frac{31}{4}$ .

7. XLIV in Arabic numerals is

A. 44.

B. 64.

C. 66.

D. 94.

8.  $1\frac{1}{4} \times 2\frac{1}{2} =$

A.  $2\frac{1}{2}$ .

B.  $3\frac{1}{8}$ .

C.  $4\frac{1}{3}$ .

D.  $6\frac{3}{4}$ .

9.  $404,8 + 0,8 =$

A. 50,06.

B. 50,6.

C. 56.

D. 506.

10.  $14 + 7 + 5 \times 2 =$

A. 7.

B. 9.

C. 12.

D. 14.

11. The product of 26 and 18 is
- A. 8.
  - B. 44.
  - C. 468.
  - D. 428.
12. If 125 is increased by 10%, the result is
- A. 12,5.
  - B. 112,5.
  - C. 135.
  - D. 137,5.
13. How many times can 32 be taken away from 256?
- A. 6
  - B. 8
  - C. 224
  - D. 288
14. A number is doubled and 9 is added to get 21. The number is
- A. 3.
  - B. 6.
  - C. 12.
  - D. 24.
15. If the multiplicand is 78 and the product is 312, then the multiplier is
- A. 4.
  - B. 234.
  - C. 366.
  - D. 390.
16.  $\frac{5}{8}$  expressed as a percentage is
- A. 12,5%.
  - B. 27,5%.
  - C. 62,5%.
  - D. 75%.
17.  $0,4 + 9 + 0,05 =$
- A. 9,54.
  - B. 9,45.
  - C. 1,80.
  - D. 1,305.

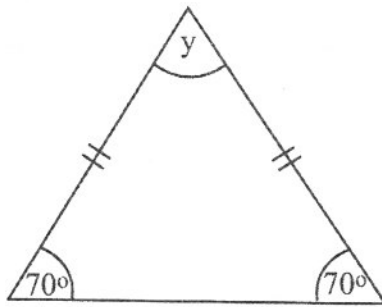
18. The sum of 8 litres and 4 millilitres in litres is

- A. 12 l.
- B. 8,400 l.
- C. 8,004 l.
- D. 4,008 l.

19. Express 12.05 midnight in 24 hour notation.

- A. 0005
- B. 0105
- C. 1205
- D. 2405

20. What is the size of angle  $y$  in the diagram below?



- A.  $40^\circ$
- B.  $60^\circ$
- C.  $80^\circ$
- D.  $140^\circ$

21. 0,25 of two hours in minutes is

- A. 25 minutes.
- B. 30 minutes.
- C. 40 minutes.
- D. 50 minutes.

22.  $3\frac{1}{2} - 1\frac{5}{6} =$

- A.  $1\frac{1}{6}$ .
- B.  $1\frac{1}{3}$ .
- C.  $1\frac{2}{3}$ .
- D.  $1\frac{5}{6}$ .

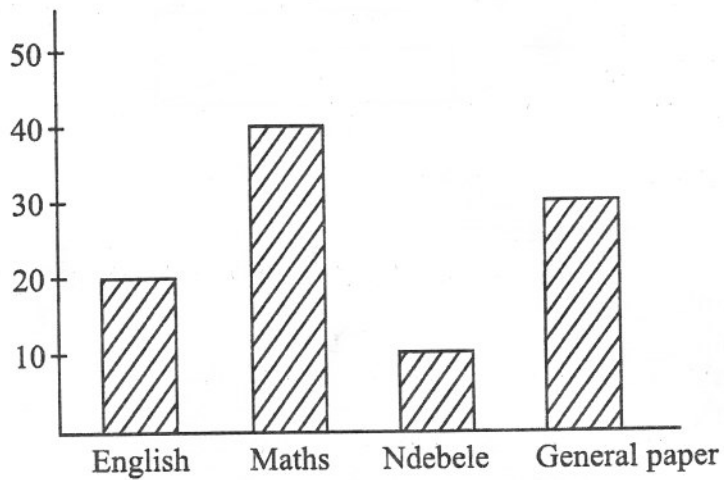
23. Which of the following years is a leap year?
- A. 1930
  - B. 1932
  - C. 1934
  - D. 1942
24. If the radius of a circle is 7 cm, then its diameter is
- A. 3,5 cm.
  - B. 14 cm.
  - C. 28 cm.
  - D. 70 cm.
25.  $\frac{2}{3} \times \frac{3}{4} + 1\frac{1}{2} =$
- A.  $\frac{1}{3}$ .
  - B.  $\frac{1}{2}$ .
  - C.  $\frac{3}{4}$ .
  - D.  $\frac{8}{9}$ .
26. A motorist covered a distance of 400 km at an average speed of 80 km/h. How long did the motorist take to complete the journey?
- A. 4 h
  - B. 5 h
  - C. 6 h
  - D. 12 h
27. How much simple interest would \$790 earn at 6% per annum for 18 months?
- A. \$86,10
  - B. \$71,89
  - C. \$71,10
  - D. \$431,60
28. In a class of 40 pupils,  $\frac{5}{8}$  of the pupils were present. How many pupils were absent?
- A. 15
  - B. 25
  - C. 55
  - D. 65

29. Sam's span is 15 cm. If the length of a chalkboard is 30 spans, its actual length is
- A. 0,02 m.
  - B. 0,15 m.
  - C. 0,45 m.
  - D. 4,5 m.
30. A man moulds 246 bricks in 1 hour. How many bricks does he mould in 40 minutes?
- A. 164
  - B. 123
  - C. 369
  - D. 82
31. A farmer had 3 black cows for every 4 brown cows. If the farmer had 28 cows altogether, how many were brown?
- A. 7
  - B. 12
  - C. 16
  - D. 21
32. A car has a net mass of 1,375 t. It carries goods weighing 0,871 t. Its gross mass is
- A. 2,346 t.
  - B. 2,246 t.
  - C. 1,504 t.
  - D. 0,504 t.
33. A rectangular plot is 6 acres. Its width is 30 m. What is the length of the plot?  
[Hint: 1 acre = 4 000 m<sup>2</sup>]
- A. 2 m.
  - B. 50 m.
  - C. 200 m.
  - D. 800 m.
34. A vendor sold goods on 15% commission. If the vendor sold goods for \$3 800, how much was the commission?
- A. \$570
  - B. \$3 220
  - C. \$3 230
  - D. \$4 370

35. Thomas bought groceries for \$21,85. If he gave the shopkeeper three \$10 notes, his change was
- A. \$51,85.
  - B. \$19,85.
  - C. \$11,85.
  - D. \$8,15.
36. A bus left Shurugwi at 0750 hours and arrived in Gweru at 0835 hours. How long was the journey?
- A. 15 minutes
  - B. 25 minutes
  - C. 45 minutes
  - D. 85 minutes
37. A road is 2,5 cm on a map. If drawn to a scale of 1: 500, its actual length is
- A. 8,5 m.
  - B. 17,5 m.
  - C. 503,5 m.
  - D. 12,5 m.
38. Rudo covered a distance of 250 m in 1 minute. Her average speed in km/hr was
- A. 15.
  - B. 10.
  - C. 30.
  - D. 25.
39. A man had \$150,00 in his bank account. He deposited \$22,50 in March and withdrew \$75,80 in April. His balance was
- A. \$253,30.
  - B. \$172,50.
  - C. \$98,30.
  - D. \$96,70.
40. A car leaves Rusape at 1045 a.m. and arrives in Harare at 1245 p.m. If the car travels at an average speed of 84 km/h, the distance covered is
- A. 120 km.
  - B. 154 km.
  - C. 156 km.
  - D. 168 km.

Use the graph to answer questions 41 and 42.

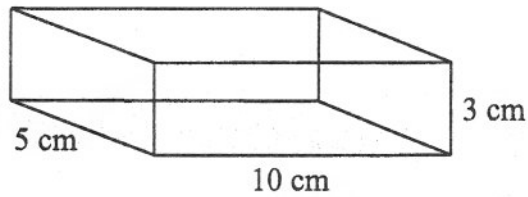
The bar graph below shows John's marks in 4 subjects.



41. The difference between John's marks in General Paper and Maths is
- A. 70.
  - B. 10.
  - C. 25.
  - D. 30.
42. John's average mark in the 4 subjects is
- A. 100.
  - B. 40.
  - C. 25.
  - D. 10.
43. A man bought a car for \$7 500. He paid 20% deposit and paid the balance in 12 months. His monthly instalment was
- A. \$9 000.
  - B. \$6 000.
  - C. \$1 500.
  - D. \$500.

[Turn over

44. The diagram shows a cuboid measuring 5 cm by 10 cm by 3 cm.



The volume of the cuboid is

- A.  $150 \text{ cm}^3$ .  
 B.  $80 \text{ cm}^3$ .  
 C.  $18 \text{ cm}^3$ .  
 D.  $30 \text{ cm}^3$ .
45. Talent bought 20 packets of yeast at \$5,65 each. Four packets were destroyed by rats. Find the profit, if he sold the remaining packets at \$7,50 each.
- A. \$7,00  
 B. \$113  
 C. \$120  
 D. \$233
46. Mrs Ngandu had 500 cattle on her farm. She sold 40 to an abattoir and gave  $\frac{1}{4}$  of the remainder to her son. How many cattle did she give to her son?
- A. 10  
 B. 115  
 C. 125  
 D. 135

Use the table to answer **questions 47 and 48**.

The table shows the number of babies born at a hospital in five days.

Day	Monday	Tuesday	Wednesday	Thursday	Friday
Number of babies	14	10	12	7	6

47. How many babies were born at the hospital in the five days?
- A. 6  
 B. 39  
 C. 49  
 D. 70

48. The highest number of babies were born on

- A. Friday.
- B. Wednesday.
- C. Monday.
- D. Tuesday.

The information below shows the number of eggs laid by 20 chickens. Use it to answer questions 49 and 50.

5; 2; 3; 5; 4; 6; 5; 8; 2; 2;  
8; 10; 10; 3; 2; 0; 5; 0; 6; 4;

49. What is the average number of eggs laid?

- A. 5
- B. 4,5
- C. 10.
- D. 4

50. The eggs were shared among Tom, Talent and Trevor in the ratio 2: 3: 5. What was Tom's share?

- A. 10
- B. 27
- C. 20
- D. 18



**ZIMBABWE SCHOOL EXAMINATIONS COUNCIL**  
**GRADE SEVEN EXAMINATION**

**MATHEMATICS**  
**PAPER 2**

**002/2**

**OCTOBER 2016 SESSION**

**Time: 2 hours**

**INSTRUCTIONS TO CANDIDATES**

1. Answer **all** questions in Section A.
2. Answer any **three** questions from Section B.
3. Section A carries 25 marks.
4. Section B carries 15 marks.
5. To obtain full marks for any question, **all working** must be shown.
6. Do **not** measure from given diagrams.
7. Electronic calculators and slide rules **must not** be used in the examination.
8. **Underline** answers and rule off after each answer.

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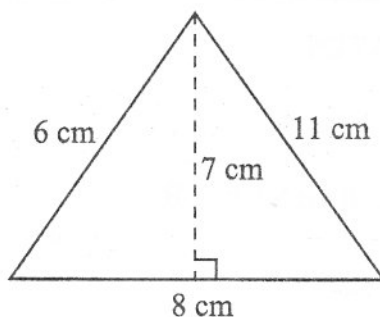
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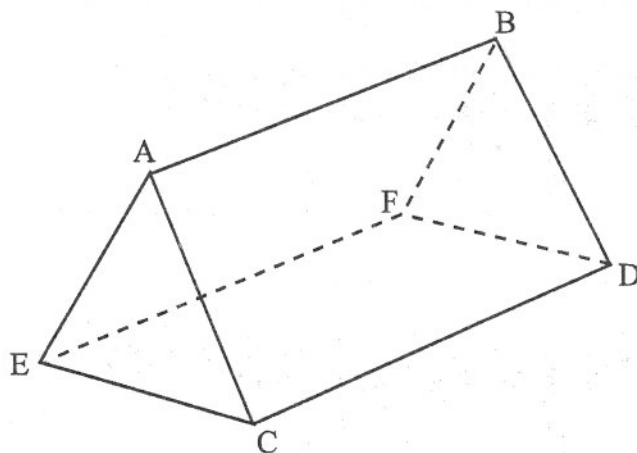
## Section A (25 marks)

Answer *all* questions in this section.

1. (a) State the value of the underlined digit in the number 2 048 625. [1]
- (b) Simplify  $2 - 1,25$ . [1]
2. (a) Find the sum of 16 and 27. [2]
- (b) Find the product of 125 and 23. [2]
3. Simplify  $9^0 + 8^1$ . [2]
4. Express  $\frac{2}{5}$  as a percentage. [2]
5. Study the diagram below and answer the question which follow.



- Calculate the area of the triangle. [2]
6. Find the volume of a cube with a side measuring 7 cm. [2]
  7. Study the triangular prism below and answer the questions which follow.



- (a) State the number of vertices of the shape. [1]
- (b) Name any line which is parallel to line AB. [1]

8. Two thirds of passengers in a bus are adults and the rest are children. If the number of adults in the bus is 40, calculate the total number of passengers. [2]
9. Study the invoice below.

NYONI SHOP		
Items	\$	C
Radio	40	00
Blankets	35	00
Grocery	62	40
<b>Total</b>		

Calculate the total cost of the items. [2]

10. The pie chart shows how \$1 200 was shared among four children.



- (a) Calculate Chido's share. [2]
- (b) Calculate the difference between Simba and Rumbie's shares. [3]

## Section B (15 marks)

Answer any *three* questions in this section.

11. Mrs Washoma bought a bed for \$800 on hire purchase terms. She paid a deposit of 25% and paid the rest in 10 equal instalments.

- (a) State the marked price of the bed. [1]  
 (b) Find the deposit she paid. [2]  
 (c) Calculate the balance paid in instalments. [2]

12. Peter, Samukeliso and James shared \$600 in the ratio 4: 5: 6 respectively.

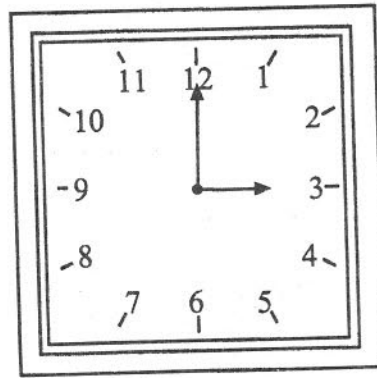
- (a) State the ratio of James to Samukeliso. [1]  
 (b) Calculate Samukeliso's share. [2]  
 (c) Find the total of Peter and James' shares. [2]

13. Brian earns \$900 per month. The table below shows how much he will spend on each item according to his budget plan.

Item	Percentage	Amount
Food	36%	-
Transport	15%	-
Rent	25%	\$225
Medical Expense	10%	-
Clothing	14%	\$126

- (a) State the amount spent on rent. [1]  
 (b) Calculate the amount spent on transport. [2]  
 (c) On medical expenses, Brian used only four percent. Calculate the amount of money he saved. [2]

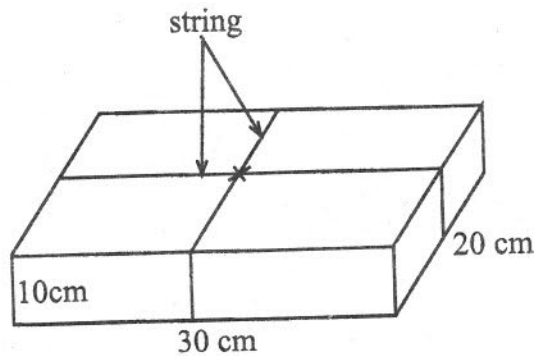
14



p.m

- (a) State the time shown on the clock face in the
- (i) 12-hour notation. [1]
- (ii) 24-hour notation. [1]
- (b) If the clock loses 5 minutes in every hour, calculate the time it will show after 2 hours. [3]

- 15 A birthday parcel which is in the form of a rectangular prism was tied around with a string as shown in the diagram.



- (a) Calculate the volume of the rectangular prism. [2]
- (b) Calculate the length of the string. [3]