

# CENTRAL ZONAL EXAM

## MATHEMATICS STD 7 - TERM 3

Time: 2Hrs

### READ THESE INSTRUCTIONS CAREFULLY

1. Use only an ordinary pencil.
2. Make sure that you have written on the answer sheet:-  
(I) YOUR NAME (II) NAME OF YOUR SCHOOL
3. For each question show the correct answer by drawing line in the brackets in which the letter you have chosen is written.

1. What is nine million three hundred and one thousand eight hundred and fifty four written in symbols?

- A. 93001854      B. 931854  
C. 9318054      D. 9301854

2. What is the value of:-

$$\frac{4^2 + 8^2}{4(50 - 30)}$$

- A. 80      B. 1  
C. 160      D. 0

3. What is 3.609 written correct to two decimal places?

- A. 3.60      B. 3.69  
C. 3.61      D. 36.09

4. What is the L.C.M of 30, 60, 90?

- A. 300      B. 150      C. 360      D. 180

5. What is the sum of the total value of 2 and the total value of 3 in the number 125378?

- A. 20300      B. 20000  
C. 300      D. 17000

6. Kelimo bought the following items:

2 kg of maize flour for Sh 120

2 packets of milk @ Sh 50

3 kg of sugar @ Sh 100

If she paid using Sh 600, how much balance did she get?

- A. Sh 480      B. Sh 520  
C. Sh 180      D. Sh 80

7. What is the value of:-

$$10 - 3x = 4 - x$$

- A. 3      B. 2  
C. 4      D. 5

8. The area of a square is  $144\text{cm}^2$ . What is the perimeter of the figure?

- A. 576cm      B. 36cm  
C. 48cm      D. 288cm

9. What is the correct order of writing the fractions  $\frac{3}{4}, \frac{5}{6}, \frac{8}{9}, \frac{2}{3}$  starting from the largest to the smallest?

- A.  $\frac{2}{3}, \frac{3}{4}, \frac{5}{6}, \frac{8}{9}$       B.  $\frac{8}{9}, \frac{5}{6}, \frac{3}{4}, \frac{2}{3}$   
C.  $\frac{5}{6}, \frac{8}{9}, \frac{3}{4}, \frac{2}{3}$       D.  $\frac{3}{4}, \frac{8}{9}, \frac{2}{3}, \frac{5}{6}$

10. Construct triangle ABC such that  $AB = BC = 8\text{cm}$ . Angle  $ABC = 100^\circ$ . What is the size of angle BCA?

- A.  $20^\circ$       B.  $60^\circ$   
C.  $40^\circ$       D.  $80^\circ$

11. A farmer land measuring 560m by 540m have posts fixed 10m apart all round the land. How many posts did she use?

- A. 110      B. 220      C. 100      D. 200

12. Mr. Wegawega bought a pair of shoes for Sh 2700 after getting a discount of 10%. What was the marked price of the pair of shoes?

- A. 3000      B. 3030      C. 3333      D. 2700

13. The table below shows the amount of milk delivered in 7 days.

Days	Mon	Tue	Wed	Thur	Fri	Sat	Sun
Milk in litres	20	18	22	16	22	23	29

What was the median of milk in litres for the 7 days?

- A. 23      B. 18      C. 20      D. 22

14. In a school of 720 pupils the ratio of boys to girls is 3:5. How many girls are there in the school?

- A. 270                      B. 144  
C. 450                      D. 240

15. What is the value of:-

$$\frac{28.24 \times 1.1}{0.004}$$

- A. 776.6                    B. 7766  
C. 77.66                    D. 7.766

16. Kaimenyi had 5 one thousand shilling notes, 9 five hundred shillings notes, 18 two hundred shilling notes and 35 fifty shilling notes. He changed all the notes to fifty shilling notes. How many notes did he get?

- A. 262                      B. 274  
C. 279                      D. 297

17. The length of a river on map whose scale is 1:200000 is 5cm. What is the actual length of the river in km?

- A. 10                      B. 20                      C. 5                      D. 50

18. What is the volume of a cylindrical container whose height is 25cm if its radius is 28cm?

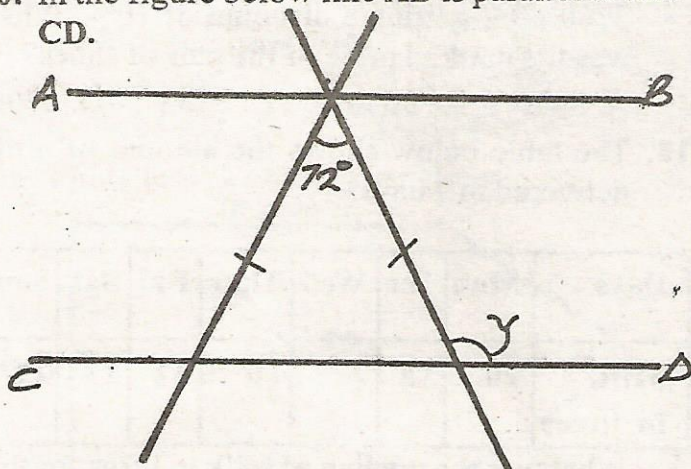
- A. 61600cm<sup>3</sup>                B. 2200cm<sup>3</sup>  
C. 14000cm<sup>3</sup>                D. 6160cm<sup>3</sup>

19. Simplify:

$$\frac{2}{3}(9x + 12y) + \frac{1}{4}(12x - 8y)$$

- A. 21x + 4y                B. 9x + 6y  
C. 6x + 9y                D. 6x + 4y

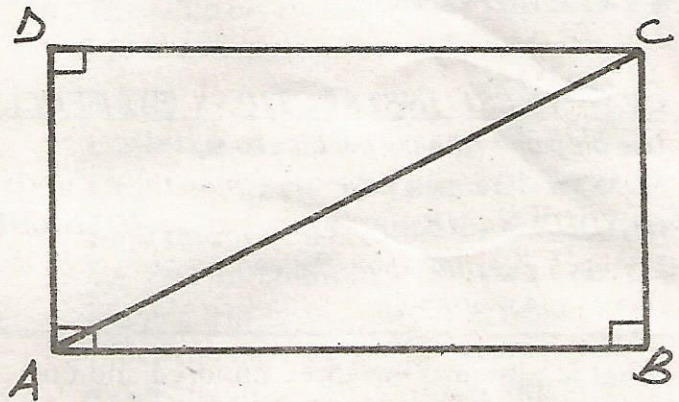
20. In the figure below line AB is parallel to line CD.



What is the value of the angle marked y?

- A. 54°                      B. 108°  
C. 126°                    D. 63°

21. The diagram below shows a rectangular plot of land ABCD 6m by 8m. What is the length of the distance AC?



- A. 14m                      B. 12m  
C. 2m                      D. 10m

22. In a meeting attended by 200 people 0.3 of them were men, 0.6 were children and the rest were women. How many women attended the meeting?

- A. 40                      B. 20  
C. 60                      D. 50

23. What is the supplement of 95°?

- A. 105°                      B. 85°  
C. 180°                      D. 265°

24. Jeremiah is paid Sh 3850 after working for 10 days. How much money would he be paid if he had worked for 8 days?

- A. Sh 3080  
B. Sh 481.50  
C. Sh 1380  
D. Sh 4095

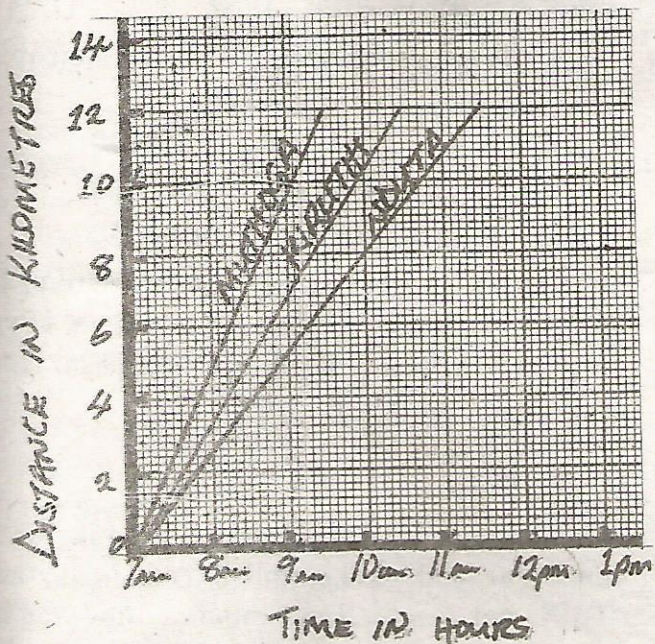
25. A family uses 10 decilitres of milk each day. How many litres of milk altogether would the family use in the months of April and May?

- A. 60                      B. 59  
C. 61                      D. 62

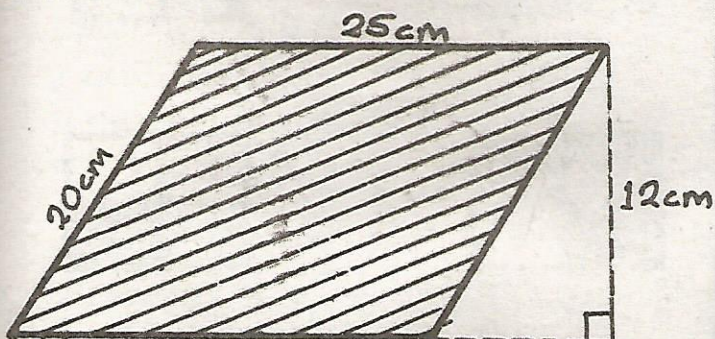
26. Which one of the following statement is CORRECT about a right angled triangle?

- A. Its external angles sum to 180°  
B. It is a four sided figure  
C. Its area is calculated by multiplying base times height  
D. One of its angle is 90°

7. Three people Nduta, Muthoga and Kiruthi left their village at 7 a.m for a church seminar 12km away. Who travelled fastest?

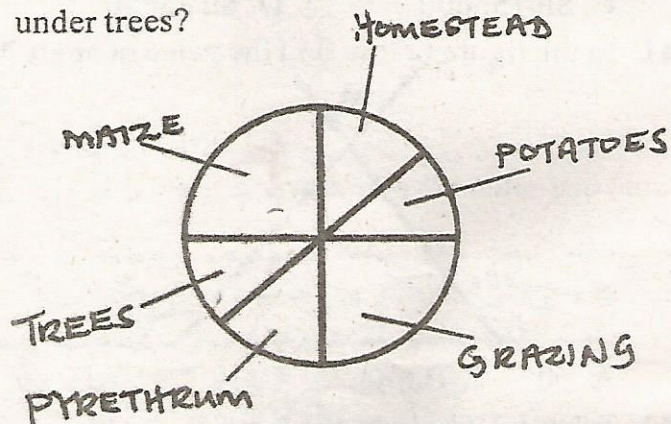


- A. Muthoga B. Nduta  
C. Kiruthi D. Both Nduta and Muthoga
8. What is the value of:  $\frac{1}{5}n - 4 = 16$   
A. 50 B. 100 C. 64 D. 4
9. What is the surface area of a pipe whose radius is 14cm and a height of 30cm?  
A. 18480cm<sup>2</sup> B. 1320cm<sup>2</sup>  
C. 2640cm<sup>2</sup> D. 1840cm<sup>2</sup>
10. What is the value of:-  
 $1\frac{1}{2} \div \frac{2}{3} + \frac{5}{8} \times \frac{3}{5} - 1\frac{1}{5}$  of  $\frac{5}{6}$   
A.  $2\frac{1}{4}$  B.  $2\frac{5}{8}$  C.  $3\frac{5}{8}$  D.  $1\frac{5}{8}$
11. John bought 150 mangoes @ Sh 5. He spent Sh 300 for transportation. What was his total expenses?  
A. Sh 750 B. Sh 450 C. Sh 455 D. Sh 1050
12. Find the area of the parallelogram.

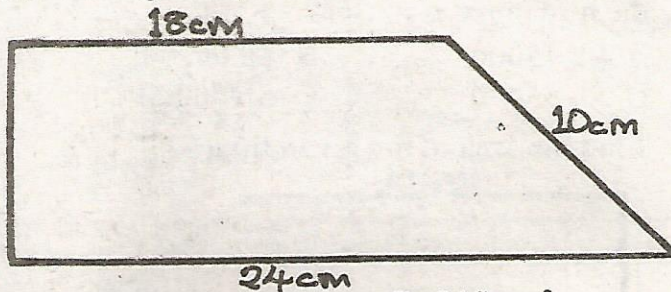


- A. 300cm<sup>2</sup> B. 240cm<sup>2</sup>  
C. 120cm<sup>2</sup> D. 500cm<sup>2</sup>

33. The temperature of a liquid was 50°C. It was cooled until it read 10°C. What was the drop in degree Celsius?  
A. 40°C B. 60°C C. 0°C D. 5°C
34. A farmer divided his land as shown in the pie chart. If the land was 16 ha. How many ha were under trees?



- A. 4 ha B. 2 ha C. 3 ha D. 6 ha
35. A car travelled a distance of 300km in 1½ hrs. What was its speed in km/hr?  
A. 200 B. 450 C. 400 D. 600
36. The main difference between a square and a rhombus is that:-  
A. two pairs of sides are parallel  
B. all sides are equal  
C. diagonals bisect at 90°  
D. all internal angles are each 90°
37. A Mathematics text book has 120 sheets of paper and a cover. Each sheet has a mass of 4 grams and the cover has 25 grams. Find the mass of the book in kilograms.  
A. 0.145 kg B. 3kg C. 0.505 kg D. 0.480 kg
38. The figure represents a trapezium. Find its area

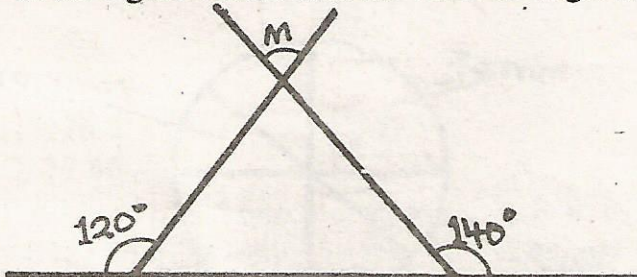


- A. 168cm<sup>2</sup> B. 210 cm<sup>2</sup>  
C. 240cm<sup>2</sup> D. 180cm<sup>2</sup>
39. Maria is now two years older than Jane. If Jane's age is represented by x. What will be their total ages after 10 years?  
A. 2x - 22 B. 2x + 22  
C. x - 20 D. x + 20

40. Entrance fees in a show ground was as follows: Adults each Sh 80 and children each Sh 30. If the show was attended by 2560 children and 985 adults. How much money was collected altogether?

- A. Sh 76800                      B. Sh 78800  
C. Sh 155600                     D. Sh 35450

41. In the figure below find the value of angle M.



- A.  $60^\circ$     B.  $40^\circ$     C.  $100^\circ$     D.  $80^\circ$

42. What is 25% loss of Sh 800?

- A. Sh 1000                      B. Sh 825  
C. Sh 200                        D. Sh 775

43. Akinyi is paid a salary of Sh 6000 and a 10% commission on all sales she makes each month. In one month she sold goods worth Sh 50000. How much money did she earn that month?

- A. Sh 5000                        B. Sh 11000  
C. Sh 10000                       D. Sh 6000

44. What is the next number in the pattern below?

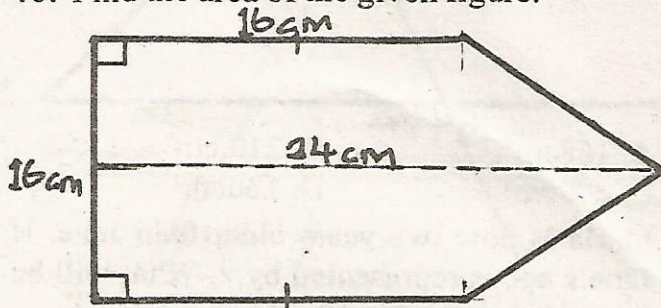
6, 9, 12, 15, 18, \_\_\_\_\_

- A. 21    B. 24    C. 26    D. 30

45. The marked price of a motor cycle was Sh 50,000. A discount of 10% is issued. If he paid in cash and the marked price is increased by 20%. if sold in hire purchase terms. Calculate the hire purchase price?

- A. Sh 45000                        B. Sh 60000  
C. Sh 55000                        D. Sh 40000

46. Find the area of the given figure.



- A.  $280\text{cm}^2$                         B.  $420\text{cm}^2$   
C.  $360\text{cm}^2$                         D.  $320\text{cm}^2$

47. A mother had  $\frac{3}{4}$  of a loaf of bread. She gave  $\frac{1}{8}$  of the loaf to her daughter and  $\frac{1}{4}$  to her son. What fraction did she remain with?

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

48. The table below shows bus fare for Nairobi - Mombasa route.

Adult	Sh 4200
Children over 10 years	Sh 2100
Children under 10 years	Sh 1050

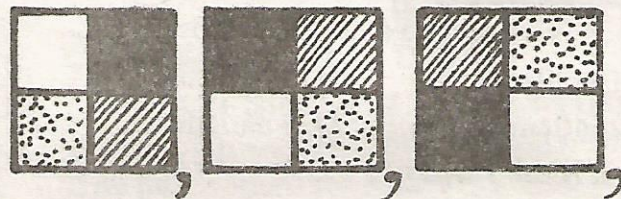
Four teachers, 20 children who were over 10 yrs and 16 children who were below 10yrs made a trip from Nairobi to Mombasa. How much did they pay altogether?

- A. Sh 50400                        B. Sh 58800  
C. Sh 75600                        D. Sh 33600

49. A man deposited Sh 25000 in a bank for 2 years. The bank paid simple interest at the rate of 10% per annum. How much money was in his account at the end of two years?

- A. 5000                              B. 30000  
C. 20000                             D. 25010

50. The figure below represents a pattern.



What is the next figure in the pattern below?

