

GRADE 8 MID TERM 2 MAY 2022

MATHEMATICS

TARGETER WINGS STANDARD EIGHT - YEAR 2022



CONTINUOUS ASSESSMENT TEST

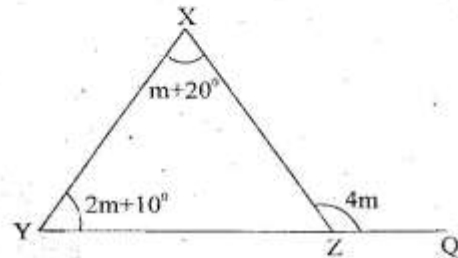


MATHEMATICS

TIME: 2 hours

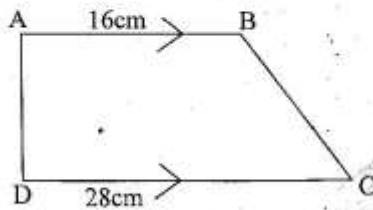
- Which one of the following numbers is three million, eight hundred and eight thousand, six hundred and six and six hundredths in symbols?
A. 33808606.606 B. 3808606.06
C. 3038606.006 D. 33308060.060
- What is the total value of digit 2 in the number 5923400?
A. 2000 B. 20000
C. Tens of thousands D. 200000
- Work out: $160 - 6 \times 20 + 80 \div 16$
A. 35 B. 45
C. 197.5 D. 4.5
- Round off 150976 to the nearest hundreds
A. 150970 B. 150000
C. 151000 D. 160000
- What is the value of $\frac{5(8^2 + 2^2)}{2(8 - 6)} - 15$?
A. 60 B. 70
C. 45 D. 100
- The area of a square plot is $5\frac{1}{16} \text{ m}^2$. Daniel went round the plot twice, how many metres did he cover?
A. 18m B. $40\frac{1}{2} \text{ m}$
C. 9m D. 81m
- What is the value of $1\frac{3}{4}$ of $2\frac{2}{3} + 1\frac{1}{4} - 7\frac{1}{3} \div 2\frac{3}{4}$?
A. $5\frac{1}{3}$ B. $\frac{1}{30}$
C. $3\frac{1}{4}$ D. $4\frac{1}{3}$
- Mwiraria had a string. He used it in equal pieces measuring 12cm, 18cm and 28cm. What was the shortest possible length of the string in which the pieces were cut?
A. 252 B. 6048
C. 58 D. 2

- Rono shared land among his three children. Ruto got $\frac{1}{2}$ of the land, Kiprono got $\frac{1}{8}$ of the land and Sang got $\frac{1}{3}$ of the remainder. He remained with 120 hectares. How much land had he to begin with?
A. 160ha B. 480ha
C. 360ha D. 600ha
- The figure drawn below shows angles in a triangle

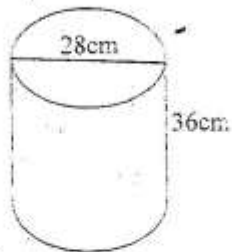


- What is the measure of angle YZX?
- A. 30° B. 70°
C. 60° D. 50°
- Wambugu bought the following items from the market:
2kg of sugar @ sh. 120
1kg of rice @ sh. 160
 $\frac{1}{2}$ kg of cooking fat @ sh. 144 per kg
 $\frac{3}{5}$ loaves of bread for sh. 135
How much balance did he get if he paid with two - five hundred shillings notes?
A. sh. 393 B. sh. 321
C. sh. 531 D. sh. 607
 - What is the value of $\frac{0.008 \times 84}{0.0032}$?
A. 21 B. 210
C. 0.21 D. 2.1
 - A lorry left Homabay at 11.30am on Monday. It took 15hours to reach Mombasa. When did it reach Mombasa?
A. Tuesday 0230h B. Monday 1230h
C. Wednesday 0230h D. Tuesday 1430h

14. What is the next number in the sequence below
8, 10, 13, 18, 25, _____?
A. 34 B. 36
C. 38 D. 37
15. The marked price of a dining table is sh. 36000. Wambugu paid sh. 30600. What was the percentage discount?
A. 18% B. 25%
C. 20% D. 15%
16. The area of the figure below is 110cm^2 .

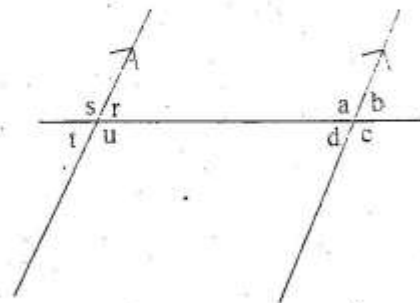


- Calculate the measure of the side marked AD
A. 22cm B. 12cm
C. 13cm D. 5cm
17. Express the ratio 5:8 as a decimal
A. 0.6 B. 0.625
C. 5.8 D. 1.6
18. Find the value of
 $(18763 - 3600 + 1257 - 1356) \div 4$
A. 12550 B. 15064
C. 3766 D. 3137.5
19. Calculate the volume of the figure below



- A. 11088cm^3 B. 3168cm^3
C. 22176cm^3 D. 53462cm^3
20. A rectangular plot of land has an area of 4800m^2 . If the width is 60m long, how long is the diagonal?
A. 200m B. 100m
C. 80m D. 120m
21. What is the place value of digit 5 in the product of 456×42 ?
A. Ones B. Tenths
C. Tens D. Hundreds.

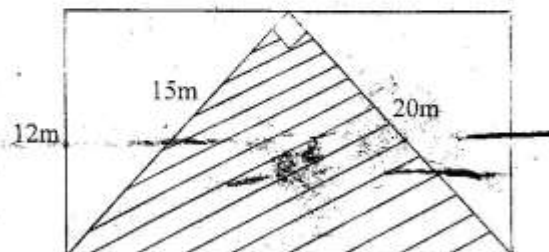
22. Solve the inequality
 $5t - 5 > 2t + 5$
A. $3\frac{1}{3}t$ B. $t > 3\frac{1}{3}$
C. $t = \frac{10}{3}$ D. $t < 3\frac{1}{3}$
23. A milk factory was supplied with 6000litres of milk by Wakulima community. The milk was then packed into 4-decilitre packets. How many packets were obtained?
A. 15000 B. 1500
C. 24000 D. 12000
24. The mean mass of 8 boys is 43kg. The mass of seven of the boys are as follows: 43kg, 41kg, 39kg, 45kg, 42kg, 44kg and 43kg. What is the age of the eight boys?
A. 43 B. 47
C. 86 D. 45
25. A river measuring 12cm on a map has an actual length of 24km. What is the scale used?
A. 1:200 B. 1:2000
C. 1:20000 D. 1:200000
26. Arrange the fractions $\frac{2}{3}, \frac{1}{2}, \frac{2}{5}, \frac{8}{15}$ in descending order
A. $\frac{2}{3}, \frac{8}{15}, \frac{1}{2}, \frac{2}{5}$ B. $\frac{2}{5}, \frac{1}{2}, \frac{8}{15}, \frac{2}{3}$
C. $\frac{1}{2}, \frac{2}{3}, \frac{2}{5}, \frac{8}{15}$ D. $\frac{2}{5}, \frac{8}{15}, \frac{1}{2}, \frac{2}{3}$
27. The figure below has two parallel lines and a transversal



- Which of the angles corresponds to angle a?
A. c B. s
C. u D. r

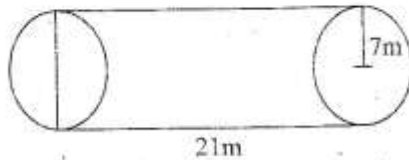
28. Which one of the following is not correct about a rhombus?
 A. All sides are equal.
 B. All angles are not equal.
 C. Diagonals are equal.
 D. Diagonals meet at right angles.
29. What is the value of the expression $\frac{m^2(p-n^2)}{pn}$ given that $m = 4$, $p = 6$ and $n = p-m$?
 A. 4
 B. $1\frac{1}{3}$
 C. $2\frac{2}{3}$
 D. $13\frac{1}{3}$
30. A tank of water which is rectangular in shape has 20litres of water. The base of the container is 40cm in length and a width of 25cm. What is the height of the tank if it is full of water?
 A. 50cm
 B. 200cm
 C. 15cm
 D. 20cm
31. Mugambi planted trees on a side of a path 160m long at intervals of 8 metres. How many trees did he plant?
 A. 21
 B. 20
 C. 40
 D. 42
32. 16 women can dig a farm in 9days. How many more women are needed to do the same job in six days?
 A. 8
 B. 12
 C. 24
 D. 16
33. A wheel of a motorbike has a radius of 21cm. How many revolutions does it make to cover a distance of 132km?
 A. 1000
 B. 100000
 C. 1000000
 D. 10000
34. The table below shows the distance in kilometres between some towns in Kenya
- | | | | | |
|---------|----------|-------|-------|-------|
| Nairobi | | | | |
| 10 | Githurai | | | |
| 28 | 18 | Ruiru | | |
| 54 | 26 | 8 | Thika | |
| 103 | 49 | 23 | 15 | Kenoi |
| 215 | 182 | 163 | 140 | 125 |
| Mwea | | | | |
- Okoth travelled from Mwea to Nairobi. He then travelled back to Nairobi making a stop at Ruiru. What distance did he cover?
 A. 243km
 B. 215km
 C. 378km
 D. 406km
35. The hire purchase price of a machine is 35% more than the cash price. The cash price is 28000. Yassir paid sh. 4000 as monthly instalments for 6 months. How much had he paid as deposit?
 A. sh. 4000
 B. sh. 18200
 C. sh. 9800
 D. sh. 13800

36. Which one of the following measurements will form a right angled triangle?
 A. 7cm, 24cm, 28cm
 B. 5cm, 13cm, 15cm
 C. 3cm, 4cm, 6cm
 D. 15cm, 20cm, 25cm
37. Wama bought x oranges and Mwangi bought $x + 1$ oranges. Odhiambo bought twice as many oranges as both Wama and Mwangi. Which one of the following expressions shows the total number of oranges they bought altogether?
 A. $6x+3$
 B. $5x+2$
 C. $2x+3$
 D. $4x+2$
38. What is the value of $\frac{8^2 + 8(3^2 + 4^2)}{4}$?
 A. 66
 B. 16
 C. 33
 D. 9
39. How many days are there between 20th January and 20th March of the year 2020?
 A. 60
 B. 59
 C. 58
 D. 61
40. A matatu travelled from Meru to Embu a distance of 180km. It took $2\frac{1}{2}$ hours. What was its speed in m/s?
 A. 20m/s
 B. 72m/s
 C. 90m/s
 D. 36m/s
41. Construct triangle XYZ where XY is 8cm, YZ is 9cm and angle ZXY is 70° . Draw a circle that touches the vertices of triangle. What is its diameter?
 A. 9.6cm
 B. 8.4cm
 C. 5.6cm
 D. 4.8cm
42. The figure below represents a triangle inside a rectangle



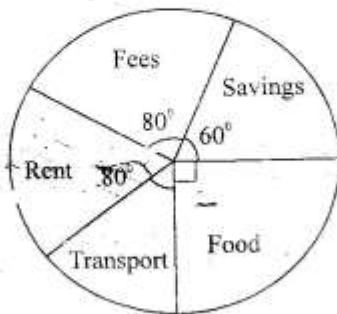
- What is the area of the unshaded part in ares?
 A. 150
 B. 1.4
 C. 0.015
 D. 1.5

43. A carton contains 0.072 tonnes of milk powder. If it was repacked into 80g packets, how many packets were obtained?
 A. 900 B. 90
 C. 9000 D. 90000
44. Fatuma deposited sh. 100000 in a bank that paid simple interest at the rate of 5% p.a. If she withdrew all the money at the end of 3 years, how much did she withdraw as interest?
 A. sh. 15000
 B. sh. 15762.50
 C. sh. 115000
 D. sh. 115762.50
45. The figure below is a pipe of water



Find its surface area

- A. $972.5m^2$ B. $924m^2$
 C. $1078m^2$ D. $462m^2$
46. Kaimenyi is a salesman. He earns a basic salary of sh. 7500 per month. He is also given 10% commission on sales above sh. 150000. In one month he sold goods worth sh. 175000. How much money did he earn that month?
 A. sh. 17500 B. sh. 10000
 C. sh. 25000 D. sh. 15000
47. The pie chart below shows how Mwangi spent his salary of sh. 9000



How much more did he spend on food than on transport?

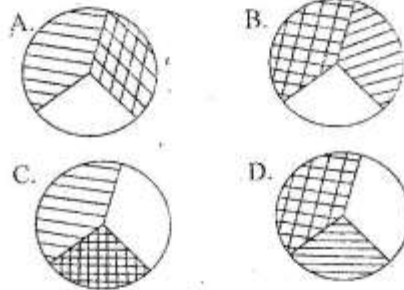
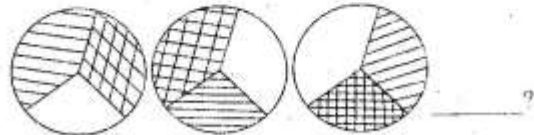
- A. sh. 625 B. sh. 2250
 C. sh. 1250 D. sh. 1000

48. The table below shows the postal rates for sending a money order

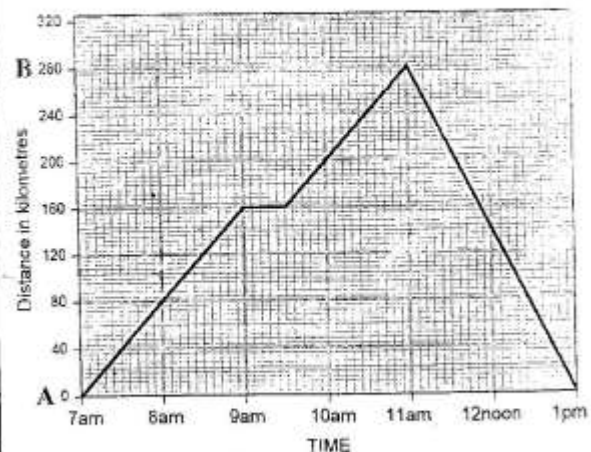
Value of order	Commission
Not-exceeding 500	sh. 42.00
501 - 1000	sh. 84.00
1001 - 2500	sh. 112.00
2501-4000	sh. 118.00
4001-7000	sh. 242.00
7001-10000	sh. 315.00

Mwakina sent two money orders, one for sh. 8500 and another for sh. 2000. how much money did he pay at the post office altogether?

- A. sh. 427 B. sh. 10815
 C. sh. 10927 D. sh. 12242
49. The figure below shows a pattern of shapes. What is the next pattern?



50. The graph below shows a matatu's journey from town A to town B and back.



What is the average speed for the whole journey?

- A. 180km/hr B. $90\frac{1}{2}$ km/hr
 C. 40km/hr D. $93\frac{2}{3}$ km/hr