

STD 7 MID TERM 2, 2017

MATHEMATICS

Time: 2 Hours

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 twelve million, seven hundred and two written in symbols?

- A. 1200702 B. 12000702
 C. 127002 D. 12000072

2. Work out:

$$\frac{48 + 3 + 51}{17}$$

- A. 54 B. 6
 C. 3 D. 27

3. What is the value of $\frac{4}{5} + \frac{3}{5} \times \frac{2}{9} - \frac{2}{3}$?

- A. $\frac{5}{12}$ B. $\frac{4}{5}$
 C. $\frac{6}{9}$ D. $\frac{4}{15}$

4. What is the value of:

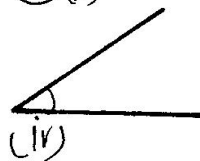
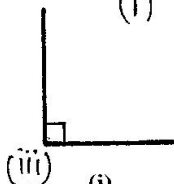
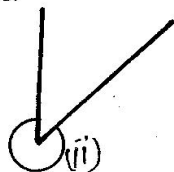
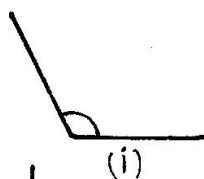
$$\frac{1.2 \times 1.6}{0.3 \times 0.2}$$

- A. 3.2 B. 320
 C. 32 D. 0.32

5. What is 1450199 rounded off to the nearest thousands?

- A. 1450000 B. 1450200
 C. 1450100 D. 1550000

6. Name the following angles.



- | | | | |
|----------------|-------------|-------------------|-------------|
| A. Acute | (ii) reflex | (iii) right angle | (iv) obtuse |
| B. Obtuse | reflex | right angle | acute |
| C. Reflex | obtuse | right angle | acute |
| D. Right angle | acute | reflex | obtuse |

7. What is the difference in the value of the square root of $\frac{25}{64}$ and $\frac{1}{49}$?

- A. $\frac{27}{56}$ B. $\frac{5}{8}$
 C. $\frac{1}{7}$ D. $\frac{43}{56}$

8. The table below shows the foods should in a kiosk. Price in shillings

| Item | Tea | Ndazi | Chapati | Fish |
|-------|-----|-------|---------|------|
| Price | 20 | 10 | 30 | 50 |

If three people took fish and chapati while 8 people ordered tea and ndazi, what was their total bill?

- A. Sh 660 B. Sh 450
 C. Sh 110 D. Sh 480

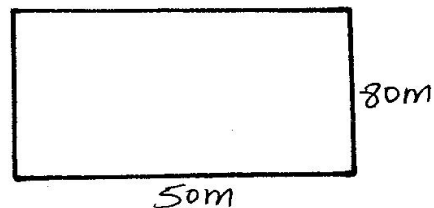
9. What is the simplified form of the expression below $\frac{1}{3}(6a + 9b) + \frac{2}{5}(15a + 10b)$

- A. $21a + 19b$ B. $6c + 8b$
 C. $8a + 7b$ D. $11a + 9b$

10. A man spent $\frac{2}{5}$ of his salary on food, $\frac{1}{4}$ on clothing, $\frac{1}{6}$ on other expenses and saves the rest. What fraction of his salary did he save?

- A. $\frac{49}{60}$ B. $\frac{13}{24}$
 C. $\frac{11}{60}$ D. $\frac{38}{60}$

11. Mwakio piece of land below was fenced with three strands of wire. What is the length of wire used?



- A. 780m B. 260m
 C. 4000m D. 130m

12. The cost price of a pen is Sh p and book Sh $p - 6$.
What is the cost of two pens and one book?

- A. Sh (9p) B. Sh (3p - 6)
C. Sh (2p - 6) D. Sh (8p - 6)

13. What is the next number in the pattern?

- 2, 3, 5, 7, 11, 13, _____
A. 15 B. 19
C. 16 D. 17

14. What is the value of:

$$\frac{2z}{z-x} + \frac{2x+4y}{z-y}$$

given $x = 2, y = 3, z = 4$

- A. 16 B. 17
C. 20 D. 16%

15. What is the sum of the complement of 60° and supplement of 70° ?

- A. 130° B. 30°
C. 110° D. 140°

16. Nyariki bought the following farm tools:

- 3 jembes @ Sh 250*
5 pangas @ Sh 150
2 spades @ Sh 165
1 wheelbarrow for Sh 2500 and a hammer for Sh 320

What balance did he get from Sh 5000?

- A. Sh 9650 B. Sh 750
C. Sh 350 D. Sh 4650

17. How many days were there between January 25th and March 12th in the year 2012?

- A. 46 days B. 47 days
C. 49 days D. 48 days

18. Pupils in a certain school contributed some money to help a needy pupil. 2 - two hundred shillings, 50 - ten shilling coins and 10 - twenty shilling coins. What was the total money contributed?

- A. Sh 700 B. Sh 1100
C. Sh 500 D. Sh 1200

19. Kamau bought goods worth Sh 800 and later sold them at Sh 1000. What was his percentage profit?

- A. 10% B. 30%
C. 40% D. 25%

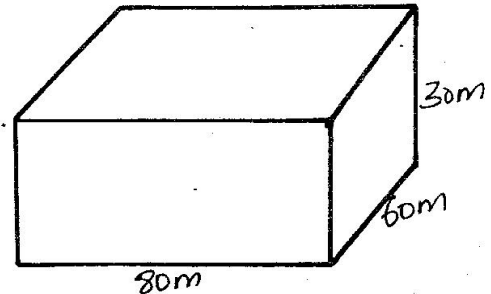
20. The table below shows a train travel schedule over several stations MNOP.

| Town | Arrival time | Departure time |
|------|--------------|----------------|
| M | 7.50 am | 8.00 am |
| N | 10.00 am | 10.45 am |
| O | 12.05pm | 1.10 am |
| P | 2.10 pm | 2.20 pm |

In which station did the train take the longest time?

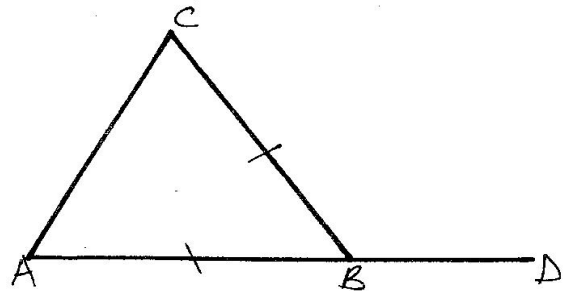
- A. O B. M C. P D. N

21. Calculate the amount of water in the following cuboid.



- A. $4800m^3$ B. $48000m^3$
C. $144000m^3$ D. $24000m^3$

22. In the triangle below ABC, angle BAC = 50° . What is the value of angle CBD?



- A. 60° B. 30°
C. 80° D. 120°

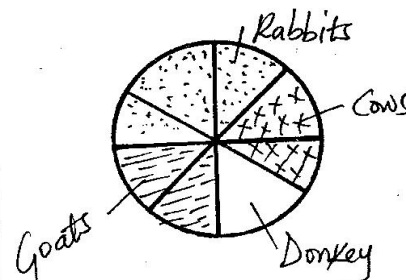
23. The mean scored by six pupils in an examination was 74. If the marks of five of them were 84, 70, 72, 68, 66. What was the mode?

- A. 84 B. 74
C. 70 D. 68

24. The marked price of an item was Ksh 2500. A discount of Ksh 400 was allowed. What was its buying price?

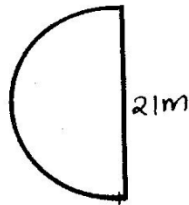
- A. Sh 2900 B. Sh 2460
C. Sh 2100 D. Sh 2400

25. The pie chart below shows the total number of animals in a farm. There are 120 animals together. How many donkeys are there in the farm?

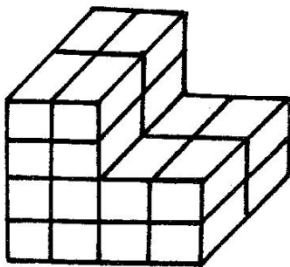


- A. 1 B. 15 C. 30 D. 20

26. Calculate the circumference of the following figure.
(Take $\pi = \frac{22}{7}$)



- A. 33m B. 54m C. 42m D. 21m
27. What is the value of p in the following inequality?
 $2p + 5 > p + 11$
A. 4 B. 5 C. 7 D. 6
28. What is the value of x in: $9 + \frac{1}{3}x = 20$
A. $20\frac{1}{3}$ B. 55
C. 29 D. 12
29. What is the sum of the total value of digit 3 and 8 in the number 3678091?
A. 3800000 B. 2992000
C. 3080000 D. 3008000
30. Ann, Cherono and Auma shared 25 oranges. Ann got as equal number of oranges as Auma. Cherono got five oranges. How many oranges did Ann get?
A. 20 B. 10
C. 15 D. $12\frac{1}{2}$
31. Kamau and Matoo shared Sh 1500 in the ration of 1:2. How much money was received by Matoo?
A. Sh 1200 B. Sh 1000
C. Sh 700 D. Sh 500
32. Which of the following sets of measurements will form a right angled triangle when constructed?
A. 5cm by 6cm by 7cm
B. 7cm by 8cm by 10cm
C. 4cm by 6cm by 10cm
D. 3cm by 4cm by 5cm
33. How many blocks are used to make the stack below?

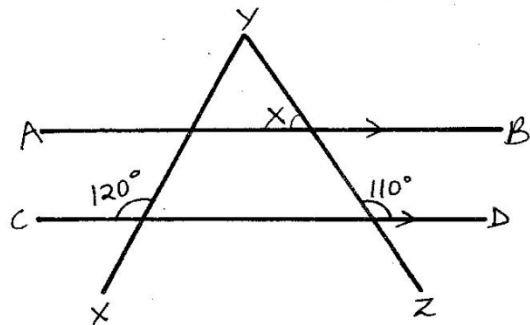


- A. 24 B. 28 C. 20 D. 30

34. Which quadrilateral has the following properties?

- (i) *Opposite sides are equal*
(ii) *Opposite angles are equal and each is 90°*
(iii) *Diagonals do not bisect each other at 90°*

- A. Square B. Rectangle
C. Rhombus D. Parallelogram
35. A square piece of land is represented by a square sides 10cm. The scale used is 1 cm represent 10m. What is the actual area of the plot?
A. 10000cm^2 B. 100cm^2
C. 10000m^2 D. 100m^2
36. Line AB is parallel to CD and line XY and ZY are transversal. What is the size of angle X ?

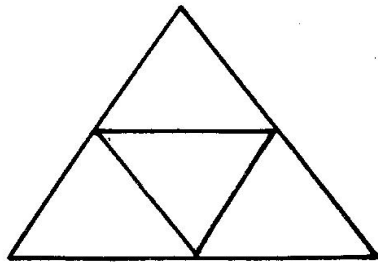


- A. 60° B. 50°
C. 70° D. 80°
37. In a certain county, the population of pigs was 41907. The number of female pigs increased by 540 after an year. In the second and third year the increase was thrice that of first year. What was the new population now?
A. 44067 B. 43527
C. 43547 D. 42447
38. The inland postage charges below were used by Rotich to send three letters weighing 40g, 150g and 700g. What was his total charges?

| Mass of letters | charges |
|-----------------|---------|
| Not over 50g | Sh 90 |
| Not over 200g | Sh 140 |
| Not over 500g | Sh 250 |
| Not over 1kg | Sh 300 |

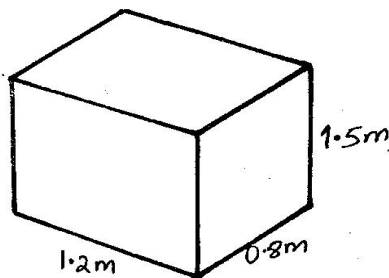
- A. Sh 780 B. Sh 530
C. Sh 230 D. Sh 480
39. One shirt cost Sh 350 and one blouse cost Sh 700. What is the cost of 3 shirts and two blouses?
A. Sh 1750 B. Sh 10500
C. Sh 2450 D. Sh 1400

40. The figure below is made up of triangles.

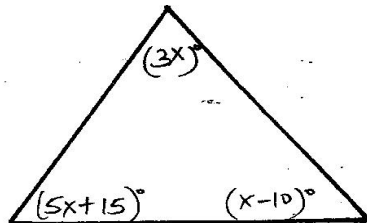


How many triangles are there?

- A. 5 B. 4
C. 8 D. 6
41. A shopkeeper bought 30 eggs for Sh 150. Five of the eggs broke. He sold the remainder at Sh 5.50 each. What was his loss?
- A. Sh 137.50 B. Sh 12.50
C. Sh 136.26 D. Sh 13.75
42. What is the volume of the solid below?

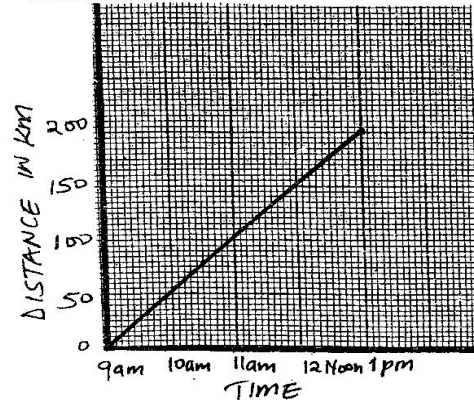


- A. $14.4m^3$ B. $1.44m^3$
C. $144m^3$ D. $1440m^3$
43. Mr. Hinga's plot is in form of square with an area of $49000m^2$. What was the size of Hinga's land in hectares?
- A. 490 ha B. 49 ha
C. 0.49 ha D. 4.9 ha
44. Which one is the simplified algebraic expression for the sum of angles in triangle below?

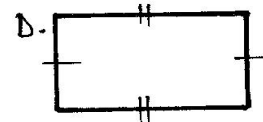
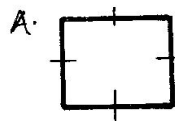


- A. $(9x + 5)^\circ$ B. $(9x + 25)^\circ$
C. $(9x + 5)^\circ$ D. $(9x - 5)^\circ$

45. The graph below shows a motorist journey from town A to town B. What was the speed of the motorist in km/hr?



- A. 40km/hr B. 50km/hr C. 30km/hr D. 60km/hr
46. Kirumba was sent to the post office with three parcels weighing 432g, 218g and 944g. What was the total mass in kg of the parcels posted?
- A. 1594kg B. 1.594kg C. 15.94kg D. 159.4kg
47. Muli bought 50 bananas for Sh 600. What will be the cost of 200 bananas if cost price of the bananas was the same?
- A. Sh 5000 B. Sh 4800 C. Sh 3000 D. Sh 2400
48. Mr. Kioko deposited Ksh 10000 in a bank that offered simple interest of Sh 500 per month. He later withdrew the total money after ten months. How much did he withdraw?
- A. Sh 5000 B. Sh 10500
C. Sh 15000 D. Sh 1500
49. Mwenda cycled for 2hrs 20 min. He had a stop over for 15 min then continued with his journey for 1 hr 10 min. He arrived at 2.00pm. At what time had he started his journey?
- A. 10.15 am B. 10.05 am
C. 10.00 am D. 9.50 am
50. The following are types of quadrilaterals. Which is the correct order of their names?



- A. Rectangle, trapezium, rhombus, square
B. Square, rhombus, trapezium, rectangle
C. Rhombus, square, rectangle, trapezium
D. Trapezium, rhombus, rectangle, square