

# CLASS 8 END TERM 3 DECEMBER 2021

## MATHEMATICS

1. Which one of the numbers is six million twenty three thousand and ninety seven?

- A. 6023097                      B. 6230097  
C. 6020397                      D. 6002397

2. What is the value of  $4(5^2 - 3^2) - 36 \div 4$ ?

- A. 9                                      B. 64  
C. 93                                      D. 55

3. Work out:  $6 + 0.02 \div 4 - 0.001 \times 100$

- A. 149.95                      B. 14.995  
C. 1.4995                      D. 5.905

4. Round off 253.978 to the nearest hundredth

- A. 253.97                      B. 253.98  
C. 254.00                      D. 253.980

5. What is the sum of the L.C.M of 36, 48 and 54 and the H.C.F of 12, 18, 42?

- A. 246                                      B. 426  
C. 438                                      D. 256

6. How many groups of 400 are there in the value of digit 6 in the number 364897?

- A. 6000                                      B. 60000  
C. 600                                      D. 60

7. Find the square root of  $14\frac{1}{16}$

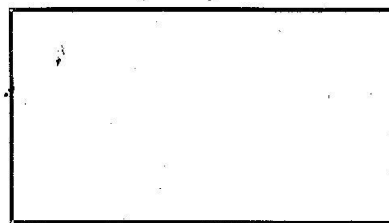
- A.  $\frac{4}{15}$                                       B.  $\frac{15}{16}$   
C.  $3\frac{1}{4}$                                       D.  $3\frac{3}{4}$

8. In the year 2020, February 26th was on a friday. What day was 8th April the same year?

- A. Wednesday                      B. Tuesday  
C. Friday                                      D. Thursday

9. Find the area of the figure below.

$(m+10)$ cm



$(2m)$ cm

- A.  $180\text{cm}^2$                       B.  $160\text{cm}^2$   
C.  $200\text{cm}^2$                       D.  $16\text{cm}^2$

10. Waiyaki bought the following items from a shop

$2\frac{1}{2}$ kg packets of sugar for sh 240

$1\frac{1}{2}$ kg rice @ sh 80

4 packets of omo for sh 120

If he paid using a sh. 500 note, how much should he give the shopkeeper in order to receive a sh. 50 note?

- A. Sh. 30                                      B. Sh. 45  
C. Sh. 35                                      D. Sh. 20

11. The perimeter of a rectangular board is 56m. The length of one of its side is 7m. What is the area of the field?

- A.  $392\text{m}^2$                                       B.  $171\frac{1}{2}\text{m}^2$   
C.  $147\text{m}^2$                                       D.  $294\text{m}^2$

12. Tom sold a phone for sh 7200 making a 20% profit. For how much had he bought the phone?

- A. Sh 6000                                      B. Sh 5760  
C. Sh 8640                                      D. Sh 1440

13. What is the value of

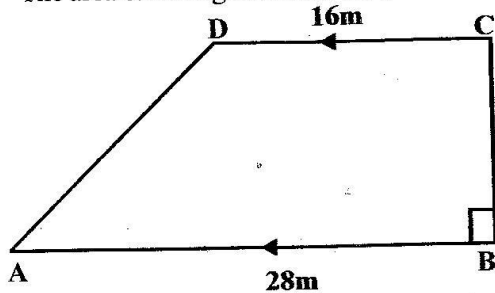
$$\frac{4.8 \times 0.057}{0.19 \times 0.06} ?$$

- A. 240                                      B. 0.24  
C. 24                                      D. 2.4

14. The price of a shirt decreased from sh 800 to sh 600. Find the ratio decrease in price?

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

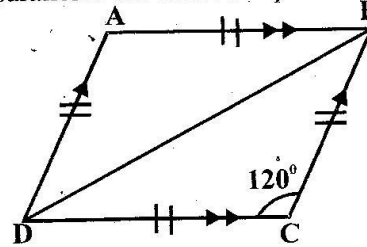
15. The area of the figure below is  $220\text{m}^2$ .



What is the measure of the side marked CB?

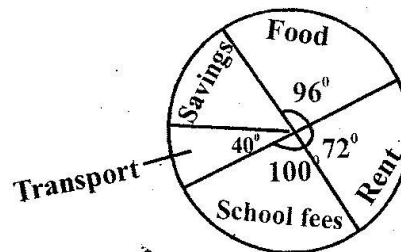
- A. 26m                      B. 44m  
C. 10m                      D. 24m
16. The weight of a 90kg bag of coffee decreased to 75kg after drying. What was the percentage decrease in weight?  
A. 20%                      B.  $16\frac{2}{3}$   
C. 15%                      D. 25%
17. What is the value of  $\frac{1}{3} + \frac{1}{2}$  of  $(\frac{2}{3} - \frac{1}{5}) \div \frac{4}{5} \times \frac{2}{5}$   
A.  $\frac{1}{20}$                       B.  $\frac{1}{4}$   
C.  $\frac{9}{20}$                       D.  $\frac{27}{60}$
18. What is the next number in the sequence below  
13, 14, 18, 27, 43, \_\_\_\_\_?  
A. 68                      B. 98  
C. 83                      D. 104
19. Sigei spent  $\frac{1}{4}$  of his salary on food,  $\frac{1}{8}$  on rent and  $\frac{1}{2}$  of the remainder on school fees. He saved sh 3000. How much was his salary?  
A. Sh 1200                      B. Sh 9600  
C. Sh 9000                      D. Sh 8600
20. The mean mass of 6 girls is 43kg. The weight of 5 of them are 35kg, 40kg, 46kg, 40kg and 45kg. Find the median mass  
A. 53kg                      B. 40kg  
C. 43kg                      D. 42.5kg
21. Three bells were set to ring after 30minutes, 20minutes and 40 minutes respectively. If they were rung together at 8.30 a.m when will they ring together again?  
A. 10.15a.m                      B. 9.30 a.m  
C. 10.30 a.m                      D. 10.45 a.m

22. In the figure below  $\angle DCB = 120^\circ$ ,  $AB = AD$ ,  $AB$  is parallel to  $CD$  and  $BC$  is parallel to  $AD$



Find angle ABD

- A.  $30^\circ$                       B.  $110^\circ$   
C.  $60^\circ$                       D.  $125^\circ$
23. A parliamentary session began at 11.15a.m. After 1hr 15 mins members went for a 50 minutes lunch break. The meeting then continued for 1 hour 40 mins. At what time did it end?  
A. 2.40 p.m                      B. 3.45 p.m  
C. 2.50 p.m                      D. 3.00p.m
24. Simplify the expression below.  
 $\frac{2(2a - 6b) + 2a + 2b}{2(2a + b)}$   
A.  $\frac{6a - 10b}{4a + 2b}$                       B.  $\frac{3a - 7b}{2a + b}$   
C.  $\frac{4a + 5b}{a + b}$                       D.  $\frac{3a - 5b}{2a + b}$
25. Kaimenyi paid sh 170000 for a motorbike after receiving a discount of 15% on the marked price. What was its marked price?  
A. Sh 30000                      B. Sh 200000  
C. Sh 230000                      D. Sh 144500
26. Yamina deposited sh 400,000 in a bank which paid simple interest at a certain rate. If she withdrew a total of sh 480,000 after two years, at what rate was the bank paying the interest?  
A. 15%                      B. 8%  
C. 10%                      D. 12%
27. The pie-chart below shows mama Mboga's monthly expenditure.



If she spends sh 4800 on rent. How much more does she spend on fees than savings?

- A. Sh 1800                      B. Sh 1600  
C. Sh 3200                      D. Sh 2400

28. Arrange the following fractions from the largest to the smallest

$\frac{7}{10}, \frac{9}{11}, \frac{3}{4}$  and  $\frac{5}{7}$

A.  $\frac{9}{11}, \frac{3}{4}, \frac{7}{10}, \frac{5}{7}$                       B.  $\frac{9}{11}, \frac{3}{4}, \frac{5}{7}, \frac{7}{10}$

C.  $\frac{3}{4}, \frac{9}{11}, \frac{5}{7}, \frac{7}{10}$                       D.  $\frac{7}{10}, \frac{5}{7}, \frac{3}{4}, \frac{9}{11}$

29. Five men can dig a shamba in 4 days. How many more men will be required to dig the shamba in one day?

- A. 20                                  B. 25  
C. 10                                  D. 15

30. Which quadrilaterals has all properties named below?

- all sides are equal
- Diagonals intersect at  $90^\circ$
- Diagonals are not equal
- opposite sides are equal and parallel

- A. Square                              B. Rhombus  
C. Parallelogram                      D. Rectangle

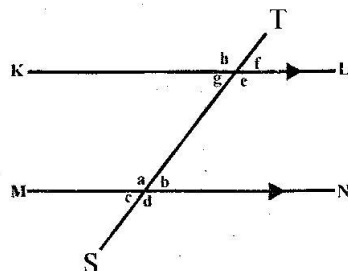
31. A 6.5km road is represented by 13cm on a map. What is the scale of the map?

- A. 1:5000                              B. 1:50000  
C. 1:50                                  D. 1:5000 000

32. Find the difference between the square of 24 and the square root of 289

- A. 7                                      B. 576  
C. 145                                  D. 559

33. In the figure below lines KL and MN are parallel. Line ST is a transversal.



Which statement is not true?

- A.  $h=e$  co-interior angles  
B.  $c=d$  supplementary angles  
C.  $e=d$  corresponding angles  
D.  $g=f$  vertically opposite angles

34. Draw a triangle PQR where  $PQ=7.5\text{cm}$ , angle  $PQR=50^\circ$  and angle  $QPR=40^\circ$ . Bisect angle QRP to meet line PQ at M. What is the measure of angle RMP?

- A.  $75^\circ$                                   B.  $85^\circ$   
C.  $90^\circ$                                   D.  $95^\circ$

35. The table below shows postage charges for sending a money order

Value of order	Commission	
	sh	cts
Not exceeding 500	42	00
501- 1000	114	00
1001 - 3000	173	00
3001 - 5000	209	00
5001 - 10 000	295	00
10001 - 20000	451	00
20001 - 30000	619	00

Muoki bought two money orders for her two children's fee. The money orders were for sh 20400 and sh 8500. How much money did she pay at the post office altogether?

- A. Sh 29814                          B. Sh 746  
C. Sh 29646                          D. Sh 29546

36. A motorist drove a distance of 240km for 4 hours. He then drove a further distance at a speed of 60km/hr for 6 hours. Find the average speed of the whole journey?

- A. 90km/h                              B. 72km/h  
C. 100km/h                              D. 60km/h

37. What is the value of k in the equation

$$\frac{2(k+1)}{3} - 4 = 6?$$

- A. 14                                      B. 10  
C. 8    D. 4

38. Use the travel graph below to answer the questions given.

A	B			
50				
80	40	C		
120	60	34	D	
200	120	74	60	E
290	240	150	80	60

Makori and his wife travelled with their two children from town A to E via C. How much did they pay altogether?

- A. Sh 616                                  B. Sh 800  
C. Sh 300                                  D. Sh 462



39. Marlin, Owuor and Silas scored goals for their team during a football match. Marlin scored  $n$  goals while Silas scored twice as many goals as Marlin. Owuor scored two goals less than silas. What was the total score?

- A.  $5n + 2$                       B.  $2n - 2$   
 C.  $3n - 2$                         D.  $5n - 2$

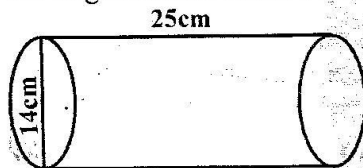
40. The hire purchase price of a dinning table requires a deposit of sh 14000 and 10 equal monthly installments. The hire purchase price is 20% more than the cash price. If the cash price is sh 36000. How much do I pay per month?

- A. Sh 2920                        B. Sh 3600  
 C. Sh 4320                        D. sh 43200

41. An empty pick-up weighs 3500kg. It weighs 8.150 tonnes when loaded with bags of sugar each weighing 50kg. What was the number of the bags loaded?

- A. 70                                B. 93  
 C. 73                                D. 163

42. The diagram below shows a water pipe.



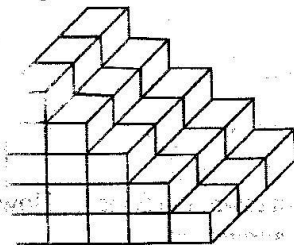
Find its surface area

- A.  $900\text{cm}^2$                       B.  $550\text{cm}^2$   
 C.  $2200\text{cm}^2$                     D.  $1100\text{cm}^2$

43. Which of the following sets of measurement will form a right angled triangle?

- A. 7m    24m    26m  
 B. 0.5m    0.12m    1.3m  
 C. 3cm    4cm    7cm  
 D. 15cm    36cm    39cm

44. How many more cubes are needed to complete the pile in the figure below?



- A. 15                                B. 75  
 C. 35                                D. 30

45. A sales girl earns a basic salary of sh 12000 plus a 5% commission on goods sold above Sh 50000. How much did she earn in a month if she made a total sales of sh 140,000?

- A. Sh 16500                      B. Sh 14500  
 C. Sh 4500                        D. Sh 19000

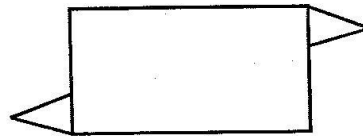
46. Simplify the inequality;  $3m - 4 > 2$

- A.  $m = 2$                         B.  $m > \frac{2}{3}$   
 C.  $m < 2$                         D.  $2 < m$

47. A cuboid has a square base of side 0.5m and a height of 50cm. How much water can it hold in litres?

- A. 25L                                B. 2.5L  
 C. 12.5L                            D. 2.5L

48. Inyangela made a solid from the net below



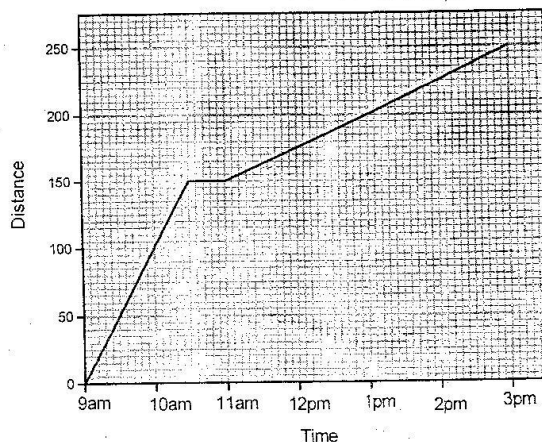
What was the product of the faces, edges and vertices after folding the net?

- A. 300                                B. 450  
 C. 270                                D. 240

49. Construct a triangle JKL in which  $JK = 8\text{cm}$ ,  $KL = 7.5\text{cm}$  and angle  $LJK = 50^\circ$ . Draw a circle to touch the three vertices of the triangle. What is twice the radius?

- A. 10.0cm                        B. 4.6cm  
 C. 5cm                                D. 2.5cm

50. The graph below shows Mrefu's journey from town P to Q. He got a puncture at 10.30 a.m. Which took him 30 minutes to repair.



What was his average speed after repairing the puncture?

- A. 25km/h                        B. 37.5km/hr  
 C. 50km/h                        D. 62.5km/h