CLASS 8 END TERM 2 2020

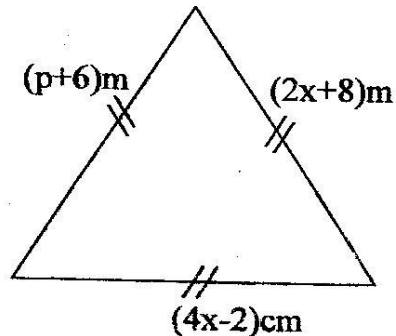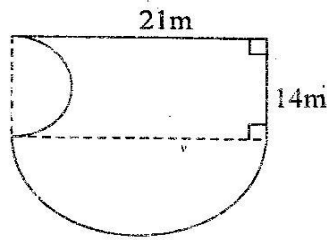## MATHEMATICS

1. Write 60174380 in words.
   A. Six million one hundred and seventy four thousand three hundred and eighty.
   B. Sixty million one hundred and seventy four thousand three hundred and eight.
   C. Sixty million one hundred and seventy four thousand, three hundred and eighty.
   D. Six hundred and one million seventy four thousand three hundred and eighty.

2. What is the total value of digit 7 in 83.467?
   A. Ones.
   B. Thousands.
   C. Hundredths.
   D. Seven thousandths.

3. What is the number 599.997 to the nearest tenths?
   A. 600.0
   B. 600
   C. 599.9
   D. 599.90

4. What is the quotient of the L.C.M and the G.C.D of the following numbers 24, 36, 45?
   A. 360   B. 120
   C. 357   D. 3

5. What is the next number in the series below?
   8, 9, 17, 26, 43, _____
   A. 69   B. 62
   C. 61   D. 59

6. Martha sold a dress for sh. 5400 after allowing a discount of 10%. How much was the marked price?
   A. sh. 4860
   B. sh. 600
   C. sh. 5940
   D. sh. 6000

7. James had $8\frac{1}{4}$ litres of milk. If all the milk was packed into $\frac{1}{4}$ litres packets, how many packets did he get?
   A. 33   B. 34
   C. 32   D. 3

8. Find the value of P in the figure below

   A. 5   B. 18
   C. 54   D. 12

9. Work out: $\dfrac{1.2 - 0.7 \times 2 + 2.6}{0.06}$
   A. 40   B. 4
   C. 0.4   D. 0.04

10. Joshua's salary was increased from sh. 18000 to sh. 24000 per month. In what ratio did his salary increase?
    A. 3:4   B. 4:3
    C. 1:3   D. 3:1

11. An empty carton weighs 950g. Calculate the total mass of the carton when loaded with forty-250g packets of tea leaves.
    A. 10kg
    B. 1.095kg
    C. 10.95kg
    D. 1.2kg

12. What is the square root of $\sqrt{0.0016}$?
    A. 0.04   B. 0.02
    C. 0.2   D. 0.4

13. Reuben started a 4hour 55 minute journey on a Sunday at 10.45pm. At what time and day did he arrive at his destination?
    A. Monday 3.40am
    B. Sunday 3.00am
    C. Monday 3.50am
    D. Sunday 3.40pm
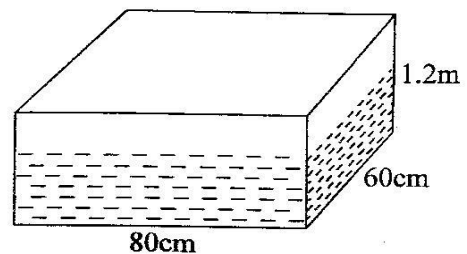
14. Calculate the distance round the figure below twice

21m

14m

A. 110m   B. 55m
C. 90m   D. 180m

15. Arrange the following from the smallest to the largest:
2.31010, 2.31100, 2.30101, 2.30011
A. 2.31100, 2.310101, 2.30101, 2.30011
B. 2.30011, 2,31010, 2,30101, 2.31100
C. 2.31100, 2.30101, 2.31010, 2.30011
D. 2.30011, 2.30101, 2.31010, 2.31100

16. In a school, $\frac{3}{5}$ of the pupils are boys. On a day when $\frac{1}{6}$ of the boys were absent, 250 boys were present. How many girls are there in that school?
A. 300   B. 480
C. 500   D. 200

17. In the year 2016, 8th February was on Monday. What day was 1st April the same year?
A. Sunday.   B. Friday.
C. Thursday.   D. Tuesday.

18. What is twice the value of k in the equation below?
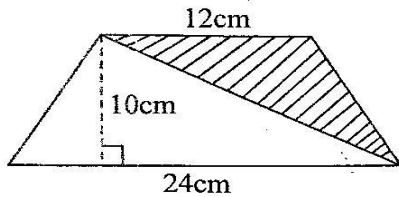$$\frac{k + 3k - 4}{4} = 6$$
A. 5   B. 7
C. 6   D. 14

19. Kapienga bought the following items from a shop:
3 rolls of toilet paper @ sh. 17
$\frac{3}{4}$ kg of sugar @ sh. 80
2kg packets of rice for sh. 70
2 bottles of juice @ sh. 70
What balance did she receive if she paid for the items using a sh. 500 note?
A. sh. 321   B. sh. 179
C. sh. 169   D. sh. 159

20. Sixteen workers can dig a field in 12 days. How many more workers are required so as to do the work in 8 days?
A. 24   B. 32
C. 8   D. 12

21. What is the simplified form of $9t + \frac{2}{5}(15t - 20w)$?
A. 15t - 8w   B. 15t + 8w
C. 12t - 4w   D. 12t - 8w

22. Work out 0.09 ÷ 1.1 and round off your answer to 3 decimal places.
A. 0.818   B. 0.81
C. 0.081   D. 0.082

23. Which quadrilateral has all the properties listed below?
- Diagonals bisect each other at right angles
- Diagonals are equal
- All sides are equal
- All angles are right angles
A. Rhombus.   B. Square.
C. Trapezium.   D. Rectangle.

24. A minibus covered a distance of 324km at an average speed of 48km/h. On the return journey the average speed increased to 72km/h. Calculate the average speed in km/h for the whole journey.
A. 57.6km/h
B. 28.8km/h
C. 60km/h
D. 68.8km/h

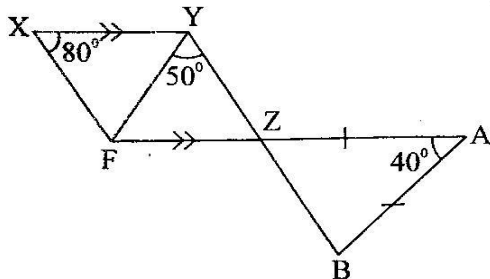25. The figure below shows a rectangular tank of water.

1.2m

60cm

80cm

How many litres does it hold when $\frac{3}{4}$ full?
A. 0.576L   B. 576L
C. 432L   D. 43.2L

26. The capacity of water in a tank was reducing by 10% each week after usage. If the tank had 2400 litres of water, how many litres remained after 2 weeks?
A. 1920L   B. 1944L
C. 2160L   D. 1680L

27. Yummina sold a goat for sh. 5100 making a loss of 15%. How much had she paid for it?
A. sh. 6000   B. sh. 1100
C. sh. 4335   D. sh. 5865

28. Simplify: $\frac{1}{2} - \frac{1}{3} \div \frac{3}{4}$ of $\frac{2}{3} + \frac{1}{3}$

A. $\frac{1}{6}$ B. $\frac{1}{3}$

C. $\frac{29}{54}$ D. $\frac{2}{3}$

29. Calculate the area of the shaded part in the figure below

12cm

10cm

24cm

A. 60cm² B. 240cm²
C. 360cm² D. 180cm²

30. Calculate the surface area of a closed cylinder with a diameter of 14cm and a height of 0.12m
A. 1848cm² B. 836cm²
C. 313.28cm² D. 682cm²

31. Simplify: $3x - 5 + 2 > 6$
A. $x > 9$ B. $3 > x$
C. $x < 9$ D. $3 < x$

32. Alpha's bike has a circular wheel of radius 49cm. How many revolutions will it have to make in order to cover a distance of 9.24km?
A. 300 B. 3000
C. 4000 D. 30000

33. Makombetti borrowed sh. 50000 from a bank that charges simple interest at the rate of 25% per annum. How much should he pay the bank at the end of two years?
A. sh. 25000 B. sh. 60000
C. sh. 75000 D. sh. 70000

34. In the figure below line XY and AF are parallel. Line ZA = AB. Angle ZAB is 40°, angle ZYF = 50° and angle FXY = 80°.

What is the size of angle XFY?
A. 60° B. 140°
C. 100° D. 40°

35. Kanana bought **g** bananas and Kanene bought **t** bananas. Munene bought five more bananas than Kanana. Which of the following equations would be used to show the total number of bananas bought by the three?
A. g + t + 5
B. 2t + g + 5
C. 2g + t + 5
D. 2g + t - 5

36. The table below shows the fares charged by matatus between different towns.

Kamuru

20	Ruai			
40	30	Komarock		
60	40	32	Umoja	
80	60	56	44	Kabanas
100	92	80	64	52	Mlolongo

Kavuu travelled from Mlolongo to Komarock. She then boarded another Matatu to Kamuru. How much did she pay?
A. sh. 100
B. sh. 80
C. sh. 120
D. sh. 140

37. The two parallel sides of a trapezium are 6cm and 8cm long. The perpendicular distance between the parallel sides is 4cm. What is the area of the trapezium?
A. 24cm² B. 28cm²
C. 32cm² D. 56cm²

38. Construct triangle RST in which angle RST = 72°, line RS = 7cm and line ST = 6.5cm. Draw a circle touching the three vertices. What is the radius of the circle?
A. 2.5cm B. 8.4cm
C. 4.2cm D. 5cm

39. The mean of 7 numbers is 11. If six of the numbers are 9, 10, 8, 4, 13 and 20, find the mode of the numbers
A. 13 B. 6
C. 12 D. 10

40. A river 48km long is represented on a map by 20cm. Which one of the following is the scale on the map?
A. 1:2400 B. 1:240
C. 1:240000 D. 1:24000

41. Silas fixed electric poles along a road 12.8km long. If the poles were fixed 40m apart on both sides of the road, how many poles were fixed?

A. 320   B. 321
C. 640   D. 642

42. The table below shows inland money order rates

INLAND MONEY ORDER		
Value of order	Ordinary commission	Express money order commission
upto 500	42.00	77.00
501 - 1000	114.00	147.00
1001-3000	176.00	202.00
300-5000	207.00	237.00
5001-10000	295.00	319.00
10001-20000	443.00	502.00
20001-30000	616.00	657.00
30000-350000	659.00	683.00

Venus sent ksh. 15200 to her daughter in Kisumu using express money order and another sh. 10500 to his son in Mbita using ordinary order. How much money did he pay altogether?

A. sh. 25700   B. sh. 26202
C. sh. 26645   D. sh. 26545

43. Construct triangle XYZ in which line XY= 8cm, angle XYZ = 110° and line YZ = 6cm. Bisect angle XYZ and let the bisector meet line XZ at T. Measure line YT

A. 4.3cm   B. 3.5cm
C. 5cm   D. 3.9cm

44. The hire purchase price of a TV is 30% more than the cash price. If the cash price was sh. 7000, how much deposit did Salome pay if she paid 3 equal monthly instalments of sh. 1500 each?
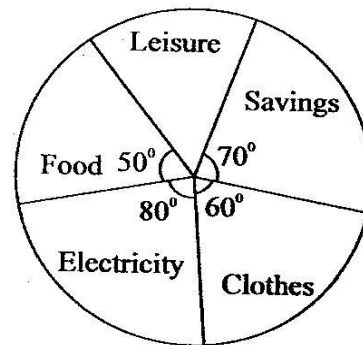
A. sh. 4600   B. sh. 2100
C. sh. 4500   D. sh. 5600

45. Which among the following sets of measurements form right angled triangle?
A. 5cm,12cm,15cm   B. 24cm,30cm,42cm
C. 10cm,24cm,26cm   D. 12cm,15cm,30cm

46. Kangogo gets a basic salary of sh. 13400. She is given a commission of $2\frac{1}{2}$ % on sales made above sh. 120000. Calculate his total earnings after selling goods worth sh. 250000.

A. sh. 3250   B. sh. 19650
C. sh. 6250   D. sh. 16650

47. The pie chart below shows how Najma spent her February salary.

If she spent sh. 2800 on leisure, how much more did she spend on electricity than food?
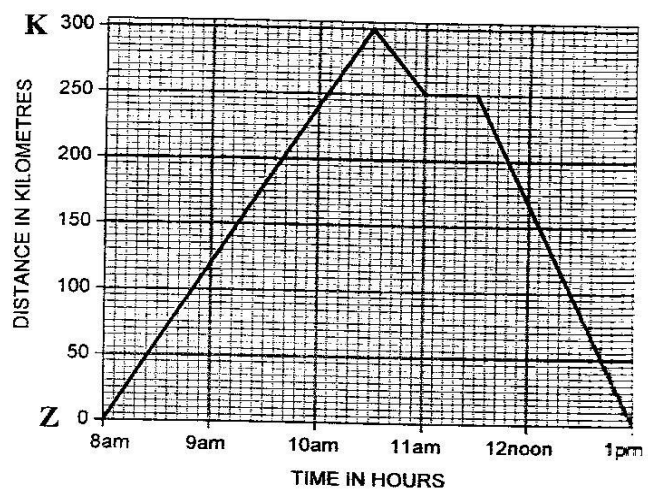A. sh. 14000   B. sh. 840
C. sh. 10080   D. sh. 2240

48. A factory produces sh. 8400 litres of juice everyday. The juice is packed in 2dl packets. How many packets are produced everyday?
A. 4200   B. 42000
C. 420   D. 42

49. What is thrice the value of 2b(a+c) + ac if a = b = 3 and c = 2?
A. 36   B. 12
C. 108   D. 66

50. The graph below shows Alika's journey from town Z to K and back

What was his average speed for the whole journey?
A. 120km/h   B. 60km/h
C. 110km/h   D. 50km/h