

STANDARD EIGHT MID TERM 1 EXAMS-2019

MATHEMATICS

- You have been given this question paper and a separate answer sheet. The question paper contains 50 questions.
- Make sure that you have written on the answer sheet

(i) Your name

(ii) Name of your school

TIME: 2HRS

1. Which one is **six million forty five thousand seven hundred and twenty and twelve thousandths**?

A. 6045720.012
B. 6045720.12
C. 60045120.12
D. 645720.012

2. What is the place value of digit 4 in the number **213.004**?

A. $\frac{4}{100}$ B. Ones
C. Tenths D. Thousandths

3. Calculate the sum of 576 and 1521 then divide the result by 100.

A. 0.63 B. 63
C. 0.063 D. 6.3

4. What is the place value of;

$$0.48 \times 0.012 \quad ?$$

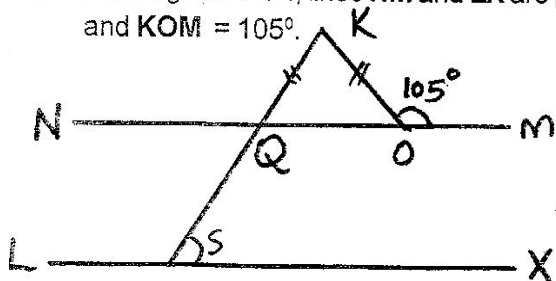
$$0.006 \div 0.02$$

A. 1.2 B. 1.92
C. 0.0192 D. 0.192

5. The circumference of a circle is 44m. What is the area of the circle? (Take $\pi = \frac{22}{7}$)

A. 616m^2
B. 968m^2
C. 308m^2
D. 154m^2

6. In the figure below, lines NM and LX are parallel and $\angle KOM = 105^\circ$.



What is the value of angle KSX?

A. 105° B. 55°
C. 75° D. 65°

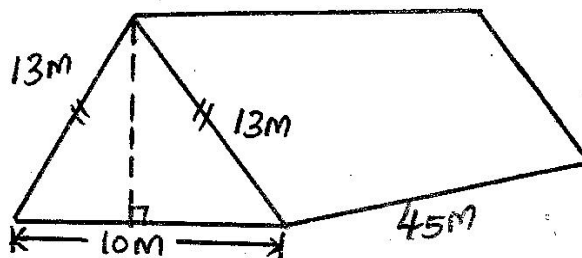
7. A painter placed a ladder on the wall 24m high. The distance of the wall was 18m away from the bottom of the ladder. What was the length of the ladder?

A. 20m
B. 30m
C. 22m
D. 25m

8. The marked price of a radio was sh. 6000. Peter paid the radio shs. 5700 after being allowed a discount. What was his percentage discount?

A. 25% B. 5%
C. $94\frac{42}{57}\%$ D. $5\frac{55}{57}\%$

9. Find the volume of the figure drawn below



A. 5850m^3 B. 2700m^3
C. 1350m^3 D. 2925m^3

10. Find the value of x in the equation:-

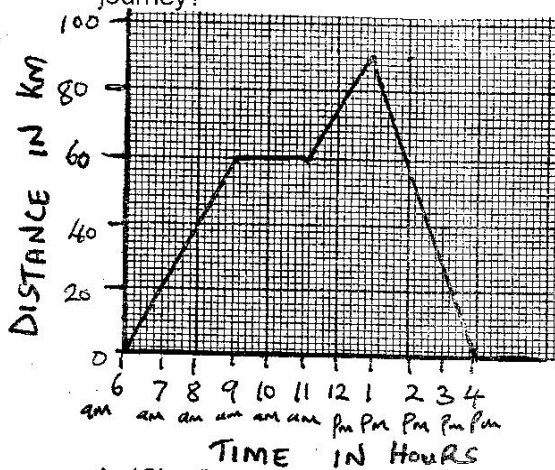
$$5x - 2(x + 1) = 4$$

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

11. On a map a rectangular plot measures 3cm by 2cm. If the scale used is 1:50,000, what is the actual area of the plot in square metres?

A. 15000
B. 1500000
C. 150
D. 50000

12. The table graph below shows Mr. Amani's journey from Vifa to Nairobi and back using a car. What was the average speed for the whole journey?



- A. 18km/hr
B. 11 $\frac{1}{6}$ km/hr
C. 22 $\frac{1}{2}$ km/hr
D. 9km/hr
13. In a sports meeting, the number of men was 150. The number of girls was four times the number of men and 80 more than that of women. The number of boys was 90 less than women. How many people attended the meeting?
A. 1860
B. 1950
C. 1500
D. 1700
14. What is the product of the G.C.D of 36, 42, 60 and the L.C.M of 8, 10, 12?
A. 12
B. 120
C. 720
D. 126
15. Which of the following statements is correct of a triangular pyramid?
A. Edges 12, faces 6, vertices 8
B. Edges 6, faces 4, vertices 4
C. Edges 8, faces 5, vertices 5
D. Edges 9, faces 5, vertices 6
16. A truck was loaded with 500 cartons of cocoa tins. One carton contains 48 cocoa tins each of mass $\frac{1}{4}$ kg. An empty carton has a mass of $\frac{3}{4}$ kg. What was the total mass of the load in tonnes?
A. 6375 tonnes
B. 6000.75 tonnes
C. 6000 tonnes
D. 375 tonnes
17. The table below shows the number of litres of milk delivered to a dairy in one week.

Day	Mon	Tue	Wed	Thu	Fri	Sat	Sun
No. of litres	70	85	72		36	55	96

What is the difference between the highest and the lowest number of litres delivered if 514 litres were delivered in the week?

- A. 100
B. 60
C. 64
D. 414

18. Which one of the quadrilaterals below has the properties shown?

- (i) All sides are equal
(ii) Opposite sides are parallel
(iii) Opposite angles are equal
(iv) Diagonals bisect each other at right angles

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

Use the price list below to answer question 19.

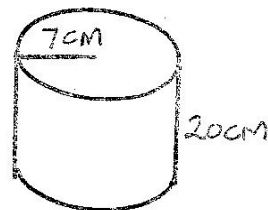
Item	Price in sh
1 litre of paraffin	45.00
2kg packets of floor	115.00
1 bar soap	120.00
50g packet toothpaste	50.00
1 kg meat	370.00

19. Pipi bought the following items.

- 3 litres of paraffin
Two 2kg packets of floor
4 bars of soap
Three 50g packets Toothpaste
1 kg of meat

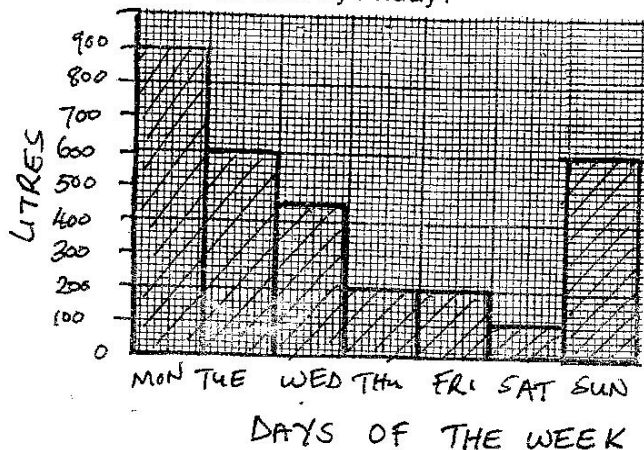
How much money did he pay for the items?

- A. Sh. 1365
B. Sh. 700
C. Sh. 1215
D. Sh. 1250
20. Stephen woke up at 5.30a.m after sleeping for 6hrs 15 minutes. At what time had he slept?
A. 11.15a.m
B. 11.15p.m
C. 10.15p.m
D. 10.15a.m
21. Ali is two years older than Sophia. If the sum of their ages is 24 years, what will be Sophia's age in 5 years time?
A. 18
B. 11
C. 16
D. 13
22. Calculate the surface area of the curved surface of the cylinder below.

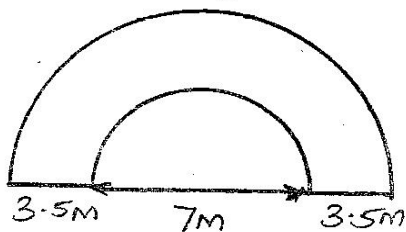


- A. 880cm²
B. 440cm²
C. 1034cm²
D. 88cm²
23. The marked price of a cupboard price is sh. 20,000. Its hire purchase price is 20% more than the marked price. Tabby paid a deposit of sh. 12,000 and the rest she paid in monthly instalments for a period of one year. How much was each monthly instalment?
A. Sh. 1000
B. Sh. 4000
C. Sh. 24000
D. Sh. 12000

24. The graph below shows the amount of water in a tank at a given time in a week. How much water was used by Friday?



- A. 700L
C. 200L
B. 0L
D. 600L
25. The base of an isosceles triangle is $2(3x + 4)$ cm and the height is 9 cm. If the area of the triangle is 117cm^2 , what is the length of the base?
A. 3cm
B. 4cm
C. 13cm
D. 26cm
26. The mass of an empty lorry is 3.75 tonnes. Its mass when loaded with maize was 6.7 tonnes. What was the mass of maize in kilograms?
A. 4.941kg
B. 2950kg
C. 4950kg
D. 12459kg
27. The diagram below represents Peter's plot of land. If he fenced it with three strands of wire, what is the total length of the wire used?



- A. 99m
C. 198m
B. 40m
D. 120m
28. What is the value of;
 $2a - b - c + d$
when $a = b - 2$, $b = c + 5$, $c = 3d$, $d = 2$?
A. 9
B. 6
C. 11
D. 3
29. What is the reciprocal of;
 $33\frac{1}{16}$?
A. $5\frac{3}{4}$
B. $6\frac{3}{4}$
C. $\frac{4}{23}$
D. $\frac{4}{27}$

30. What is the next number in the sequence below?

$$2\frac{1}{4}, 1\frac{7}{8}, 1\frac{1}{2}, \underline{\hspace{2cm}}$$

- A. $\frac{25}{36}$
C. $1\frac{9}{25}$
B. $1\frac{25}{36}$
D. $1\frac{1}{8}$

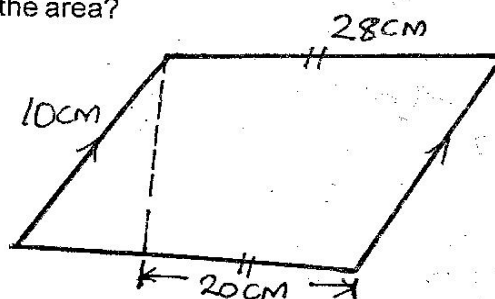
31. What is the value of;

$$2\frac{1}{2} + 3\frac{1}{4} ?$$

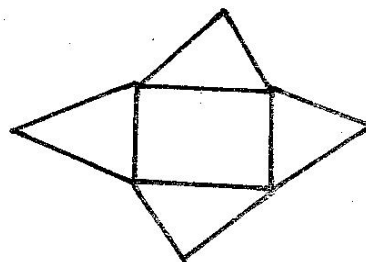
$$1\frac{1}{2} + 3\frac{3}{8}$$

- A. $\frac{15}{18}$
C. $1\frac{3}{15}$
B. $1\frac{2}{4}$
D. $1\frac{7}{39}$

32. The figure below of a parallelogram. What is the area?



- A. 140cm^2
C. 280cm^2
B. 60cm^2
D. 168cm^2
33. 0.825 litres of a liquid medicine was used to fill bottles each with a capacity of 0.025L. How many such bottles were obtained?
A. 33
B. 0.33
C. 330
D. 3.3
34. Convert $12\frac{1}{2}\%$ as a decimal.
A. 1.025
B. 0.0125
C. 0.125
D. 12.5
35. The temperature of water was 10°C below the freezing point. It was placed on the fire until it boiled. What was the rise in temperature?
A. 90°C
B. 110°C
C. -10°C
D. -90°C
36. The figure below represents the net of a solid. The net is folded to form the solid. How many edges will it have?



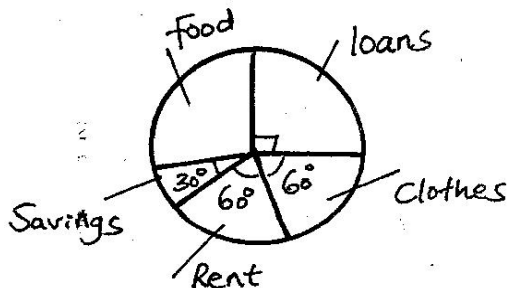
- A. 5
B. 12
C. 4
D. 8

37. A cuboid measures 6cm long, 5cm wide and 4cm high. What is the total length of the edges?
 A. 60cm B. 120cm
 C. 90cm D. 30cm

38. There were m men in a bus. The number of children in the bus were three times that of men but eleven more than that of women. The total number of men, women and children in the bus was 45. Which one of the following equations can be used to find the number of men?

- A. $7m + 11 = 45$ B. $5m - 11 = 45$
 C. $7m - 11 = 45$ D. $4m + 11 = 45$

39. The pie-chart below shows how Bobo spent her salary.



How much more did she spend on loans than rent if she spent sh. 4000 on food?

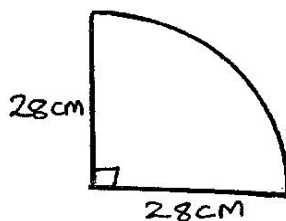
- A. Sh. 1000 B. Sh. 2000
 C. Sh. 5000 D. Sh. 3000

40. What is the value of;

$$\frac{25.6 \times 16.9}{16 \times 1.3} ?$$

- A. 2.08 B. 208
 C. 20.8 D. 0.208

41. Find the perimeter of the given quadrant
 (Take $\pi = \frac{22}{7}$)



- A. 22cm B. 44cm
 C. 100cm D. 50cm

42. What is the product of 523×321 rounded off to the nearest thousand?

- A. 168 B. 167883
 C. 168000 D. 167800

43. A cylindrical container whose diameter is 1.4m is 8m high. What is its capacity in litres?

- A. 0.01232 B. 1232
 C. 12320 D. 12.32

44. A saleslady is paid a salary of sh. 4150 per month. She is also paid a commission of 15% of sales above sh. 20000. How much did she earn in a month when she sold goods worth sh. 50,000?

- A. Sh. 4,150
 B. Sh. 8,650
 C. Sh. 6,000
 D. Sh. 10,150

45. Work out:-

$$2\frac{1}{2} + 3\frac{3}{4} \text{ of } \frac{4}{15} + 1\frac{2}{3}$$

- A. $5\frac{1}{6}$ B. $3\frac{1}{3}$
 C. $4\frac{1}{6}$ D. $4\frac{1}{2}$

46. The mass of two cartons are in the ratio of 4:5. If the heavier one is 90kg, what is the mass of the lighter one?

- A. 50kg B. 72kg
 C. 18kg D. 40kg

47. Work out:-

$$\sqrt{0.000324}$$

- A. 0.18 B. 0.00018
 C. 1.8 D. 0.018

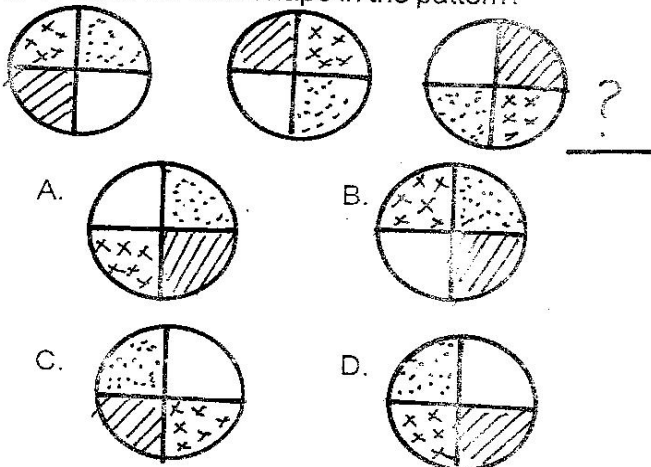
48. Construct triangle ABC where $AC = BC = 3\text{cm}$ and angle $ACB = 110^\circ$. Construct a circle that passes through points A , B and C . What is the radius of the circle?

- A. 2.1cm B. 5.4cm
 C. 4.2cm D. 2.7cm

49. Three signals flash at intervals of 70 minutes, 28 minutes and 40 minutes respectively. If they flash together at 12.40a.m, at what time will they flash again at the same time?

- A. 5.20p.m B. 2.40a.m
 C. 5.20a.m D. 2.40p.m

50. What is the next shape in the pattern?



- A. B.
 C. D.