



TURNING VIEW 2021

MATHEMATICS

002

8

READ THESE INSTRUCTIONS CAREFULLY

- 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

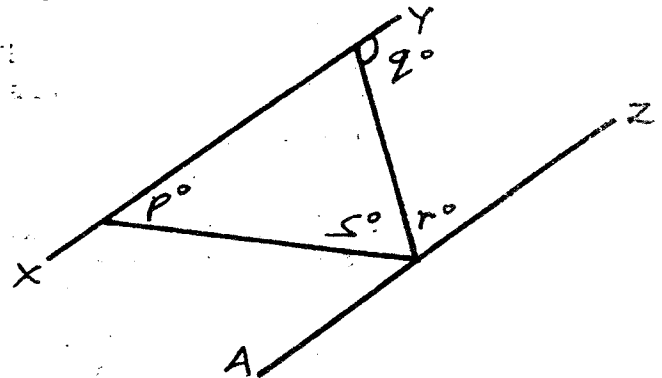
TIME: 2HRS

(i) Your name

(ii) Name of your school

- Which one of the following numbers is three million three thousand and thirty?
A. 3000330 B. 330030
C. 3003030 D. 30030030
- What is the place value of digit 1 in the product of 380 and 564?
A. Tens of thousands
B. Thousands
C. Hundreds
D. Hundreds of thousand
- Round off 29.324 to the nearest whole number.
A. 30 B. 29.00
C. 29.32 D. 29
- What is the least number than can be added to 47867 to make it divisible by 11?
A. 5 B. 3
C. 4 D. 2
- By how many times is the total value of digit 5 more than the total value of digit 2 in the number 45328?
A. 40 B. 250
C. 25 D. 4980
- Work out:-
 $14 - (12 \times 6) + \frac{2}{9}$ of $108 + 30$
A. 47 B. 19
C. 41 D. 13
- A minibus weighed 3.5 tonnes when empty. It weighed 7.84 tonnes when carrying 62 passengers. What was the average weight of each passenger in kilogrammes?
A. 70 B. 120
C. 80 D. 82
- Karimi bought the following items;
3kg of rice at sh. 120 per kg
1 1/2 kg of meat at sh. 320 per kg
2 1/2 kg potatoes at sh. 60 per kg
2kg tin of cooking fat for sh. 230
If he had sh. 1500, how much money was he left with?
A. Sh. 50 B. Sh. 280
C. Sh. 120 D. Sh. 220

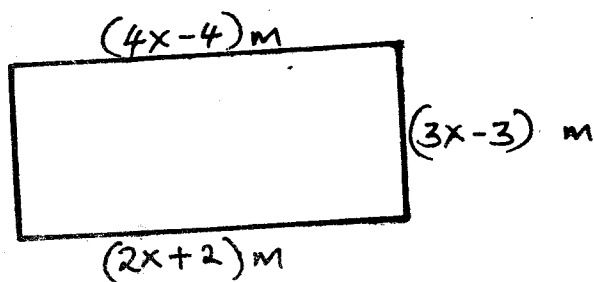
- Which of the following sets of measurements will give a right angled triangle?
A. 1.0cm, 2.4cm, 2.6cm
B. 4.2cm, 7.5cm, 8.5cm
C. 5.5cm, 1.2cm, 5.4cm
D. 2.5cm, 3.5cm, 6.5cm
- In the figure below, XY is parallel to ZA. The angles are marked in letters p, q, r, s.



- Which of the following statements is true?
A. $p^\circ + r^\circ + s^\circ = 180^\circ$ B. $p^\circ + q^\circ + r^\circ = 180^\circ$
C. $q^\circ + r^\circ + s^\circ = 180^\circ$ D. $p^\circ + q^\circ + s^\circ = 180^\circ$

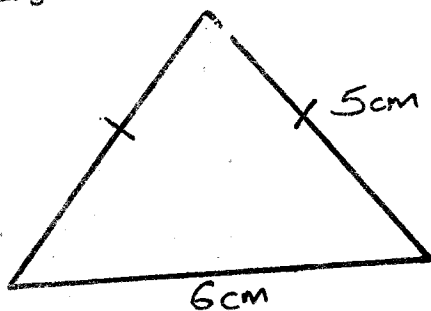
- What is the value of k in the equation below?
 $\frac{2k-3}{3} + 2k = 15$
A. 6 B. 2
C. 3 D. $2\frac{1}{2}$
- After receiving a discount of 12%, Silas paid sh. 10,560 for a bed. Calculate the marked price of the bed
A. Sh. 1267.20 B. Sh. 12000
C. Sh. 24672 D. Sh. 9292.80
- What is the next number in the sequence below?
1, 8, 27, 64, _____
A. 125 B. 216 C. 324 D. 165
- Kinyago fenced a rectangular piece of land measuring 80m and 120m. He used 6 strands of 120m. He used 6 strands of wire, leaving a space of 5m for the gate. What was the total length of the wire used?
A. 2400m B. 2370m
C. 1200m D. 400m

15. The figure below is a plot of land.



What is the area of the plot in cm^2 ?

- A. 48cm^2 B. 48000cm^2
 C. 480cm^2 D. 480000cm^2
16. Lorraine has p mangoes. She has 4 more bananas than mangoes and twice as many oranges as the total number of mangoes and bananas. How many fruits does she have altogether?
- A. $4p + 8$ B. $6p + 8$
 C. $3p + 12$ D. $6p + 12$
17. Hassan bought 150 pineapples @ sh. 80 for every 5 pineapples. How much should he sell a pineapple in order to make a profit of 25%?
- A. Sh. 25 B. Sh. 20
 C. Sh. 16 D. Sh. 12
18. The price of a stool decreased from sh. 500 to sh. 400. What was the percentage decrease?
- A. 20% B. 25%
 C. 80% D. 125%
19. A wheel of a bicycle has a radius of 21cm. How many revolutions does it make to cover a distance of 132km?
- A. 1000 B. 100000
 C. 10000 D. 1000000
20. Zadoc spends $\frac{1}{2}$ of his salary on food. $\frac{2}{5}$ of the remainder on rent and the rest on clothes. How much was his salary if he spends sh. 1500 on clothes?
- A. Sh. 5000 B. Sh. 4500
 C. Sh. 6500 D. Sh. 450
21. The diagram below shows an isosceles triangle. Calculate the area of the triangle.



- A. 24cm^2 B. 12cm^2
 C. 30cm^2 D. 15cm^2

22. It takes 8 men to dig a trench in 18 days. How many more men will be required to dig in 12 days?

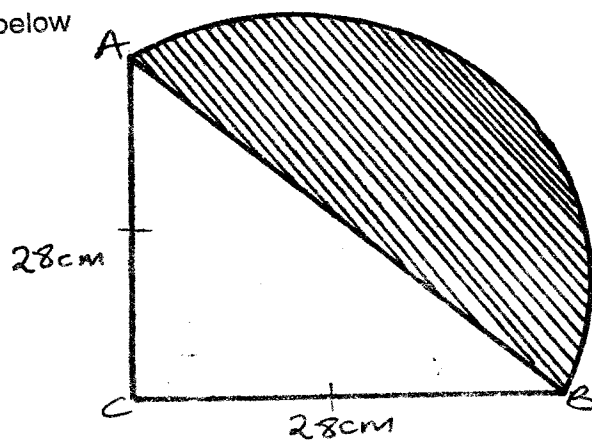
- A. 12 B. 4
 C. 9 D. 6

23. Simplify the expression:-

$$\frac{3(q+2r) + 2(q-4r)}{6(4q-2r) - r}$$

- A. $\frac{5q-2r}{24q+13r}$ B. $\frac{5q-2r}{24q-13r}$
 C. $\frac{5q-2r}{24q+11r}$ D. $\frac{5q+2r}{24q-13r}$

24. Find the area of the shaded part in the figure below



- A. 224cm^2 B. 448cm^2
 C. 392cm^2 D. 616cm^2
25. Construct triangle XYZ where $XY = 7\text{cm}$, angle $XZY = 50^\circ$ and angle $ZXY = 75^\circ$. Drop a perpendicular from point Z to meet XY at T. Measure TY
- A. 4cm B. 5cm
 C. 4.6cm D. 5.3cm
26. The marked price of a sewing machine is sh. 6000. Mukelema bought it on hire purchase terms by paying a deposit of Kshs. 4000 and 10 monthly instalments of Kshs. 305. How much more did he pay for the machine?
- A. Kshs. 1050 B. Ksh. 7050
 C. Kshs. 3050 D. Ksh. 2000
27. What is the least number that can be divided by 12, 18 and 24 without a remainder?
- A. 6 B. 3
 C. 72 D. 36
28. Find the square root of;

$$\sqrt{1296}$$

- A. 34 B. 36
 C. 362 D. 6

29. During a pandemic Kamwana woke up at 3.20a.m on Tuesday after sleeping for 8 hours and 45 minutes. At what time did Kamwana sleep in 24hrs clock system?

- A. 1835hrs B. 0635hrs
C. 0525hrs D. 1725hrs

30. Which of the following sets of numbers decreases with 100?

- A. 6342, 6242, 6142, 6042
B. 6649, 6749, 6449, 6849
C. 2103, 2203, 2303, 2403
D. 7342, 7442, 7542, 7642

31. The following are properties of quadrilaterals;

- (i) *Opposite angles are equal*
(ii) *Diagonals bisect each other at right angles*
(iii) *Diagonals are equal in length*
(iv) *Has four equal co-interior angles*
(v) *Diagonal do not bisect at a right angle*

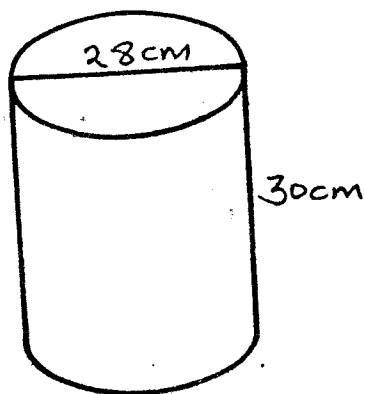
Which properties were true for a rectangle?

- A. i, ii, vi B. i, ii, vi
C. ii, iii, iv D. iii, iv, v

32. Abdallah a salesman is paid a basic salary of sh. 10,000 per month. He is also paid a 10% commission on goods sold. In one month he sold goods worth sh. 200,000. How much did he earn in that month?

- A. Sh. 15,000 B. Sh. 25,000
C. Sh. 30,000 D. Sh. 10,000

33. Find the volume of the container below when half full in decilitres (Take $\pi = \frac{22}{7}$)



- A. 92.4dl B. 18480dl
C. 94.2dl D. 184.8dl

34. Solve the inequality below:-

$$4y - 20 > 2y$$

- A. $y < 10$ B. $y > 3\frac{1}{3}$
C. $10 < y$ D. $y < 3\frac{1}{3}$

35. The table below shows the postal rates for sending money orders.

Value of order Sh	Ordinary money order cummission	Express money order commission
Upto 500	42.00	77.00
501 - 1000	114.00	146.00
1001-3000	174.00	203.00
3001-5000	200.00	237.00
5001-10000	295.00	319.00
10001-20000	441.00	503.00

Kangoro sent ordinary money order of sh. 8700 to his son in Elimu Kibao and sh. 9400 express money order to his daughter in Masimachungu. How much was the total amount of money paid at the Post Office altogether?

- A. Sh. 18100 B. Sh. 18541
C. Sh. 18898 D. Sh. 19044

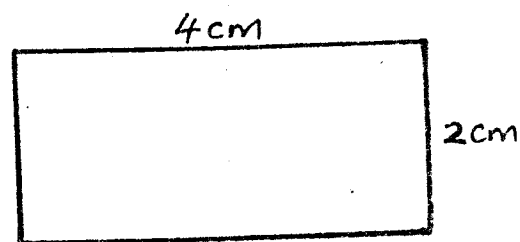
36. Construct a triangle DEF in which line EF = 5.6cm, DE = 4cm and angle DEF = 120° . Draw a circle that passes through the vertices of the triangle. What is the length of half of the diameter?

- A. 4.9cm B. 5.2cm
C. 2.6cm D. 9.6cm

37. Kipsang deposited sh. 24000 in a bank that pays a simple interest at a rate of 10% per annum. What was the amount of interest earned at the end of 18 months?

- A. Sh. 3600 B. Sh. 43200
C. Sh. 3720 D. Sh. 27600

38. The figure below is a rectangular piece of land measuring 4cm by 2cm.



It is drawn to a scale of 1:40000. What is its area in hectares?

- A. 64ha B. 32ha
C. 44ha D. 128ha

39. In 2015 a town had a population of 400000 people. In 2016 the town had a population of 500000 people. What was the percentage increase of the population?

- A. 20% B. 80%
C. 25% D. 125%

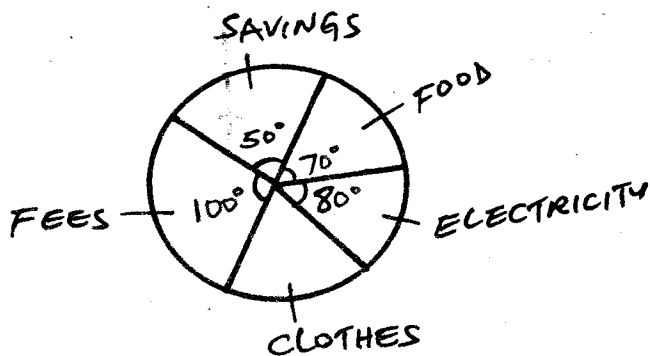
40. What is $7\frac{1}{2}\%$ expressed as a ratio in its simplest form?

- A. 15:2 B. 40:3
C. 15:200 D. 3:40

41. A cylindrical log has a radius of 0.7cm and a length of 2m. What is the area of the curved surface? (Take $\pi = \frac{22}{7}$)

- A. 8.8m^2 B. 4.4m^2
C. 10.56m^2 D. 14.96m^2

42. The pie-chart below shows how Gitumbi spent his August salary in 2014.



If he spent sh. 2400 more on school fees than clothing, how much does he save?

- A. Sh. 960 B. Sh. 3000
C. Sh. 14400 D. Sh. 21600

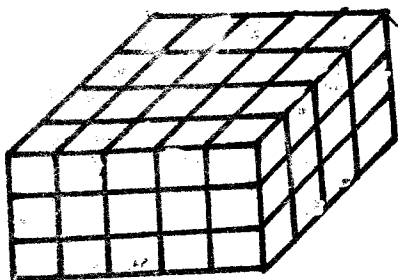
43. What is half the value of;

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

when $x = 6$, $y = x + 4$, $z = \frac{1}{2}y$?

- A. 4 B. 3
C. 2 D. 1

44. The figure below shows a stack of cubes.



If it was dipped in a green paint, how many faces got the paint on two faces only?

- A. 20 B. 32
C. 24 D. 30

45. Korir visited her aunt on 4th of February of 2016. He stayed there upto the morning of 14th of April. How many nights did he stay there?

- A. 60 B. 61
C. 62 D. 59

46. Ten std. 8 girls of Getune school sat for a test and had a mean score of 6.3. The scores of the nine pupils were 5, 6, 7, 8, 3, 4, 8, 9, 8. What was the score of the tenth pupil?

- A. 10 B. 5
C. 8 D. 7

47. Sigei left Kericho to Bomet at 7.20a.m a distance of 168km. After driving for 40min he got a puncture which took him 1 hour to repair. He then continued with the journey and arrived at Bomet at 10.00a.m. What was the average speed for the whole journey?

- A. 70km/h B. 84km/h
C. 63km/h D. 60km/h

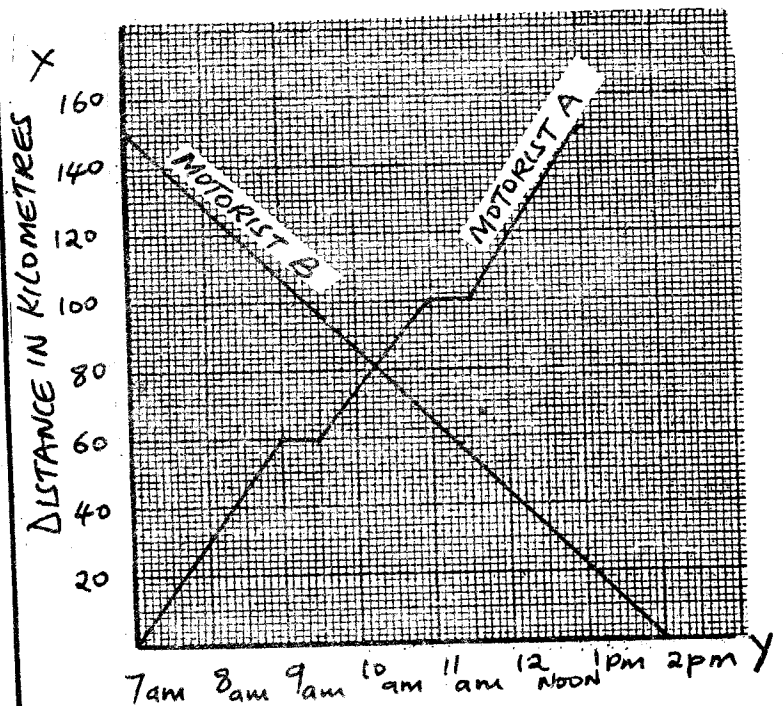
48. What is the value of; $91013 \div 13$?

- A. 71 B. 701
C. 7001 D. 70001

49. Ice was put in a fridge and cooled to -22°C . It was then heated up to 20°C . What was the rise in temperature?

- A. 22°C B. 20°C
C. 42°C D. -20°C

50. The graph below shows motorists A and B moving in different directions.



How far apart were they when motorist A stopped to rest the second time?

- A. 36km B. 40km
C. 46km D. 18km