

BRIGHT VISION SERIES

STD 8 - YEAR - 2023

MATHEMATICS

SASON
001

READ THESE INSTRUCTIONS CAREFULLY

1. Use an ordinary pencil only.
2. Make sure that you have written on the answer sheet.

I. YOUR NAME _____

II. NAME OF YOUR SCHOOL _____

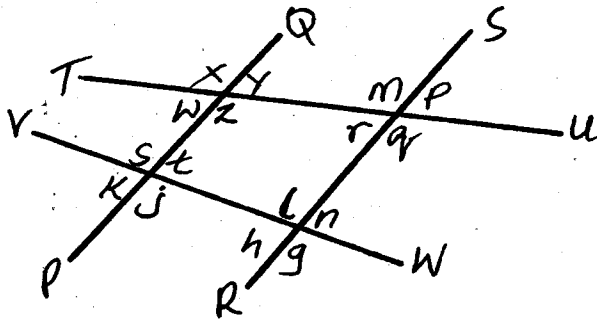
Time: 2 Hours

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. What is 18801091 written in words?
A. Eighty one million, eight hundred and one thousand and ninety one
B. Eighteen million, eighty one thousand and ninety one
C. Eighteen million, eight hundred and one thousand and ninety one
D. Eighteen million; eight hundred and ten thousand and ninety one 2. Round off 25684238 to the nearest millions.
A. 26000000 B. 30000000
C. 25700000 D. 25000000 3. By how much is the total value of digit 9 greater than the total value of digit 7 in the number 296742?
A. 90700 B. 700
C. 90000 D. 89300 4. What is the place value of digit 3 in the product of 921 and 47?
A. Tens of thousands
B. Thousands
C. Hundreds
D. Hundreds of thousand 5. What is the smallest number which must be subtracted from 1373375 to make it divisible by 11?
A. 1 B. 2
C. 3 D. 4 6. Kimani's has a square piece of land which has an area of 2209m². Find the length of one side of the piece of land.
A. 47m B. 43m
C. 57m D. 53m 7. Arrange the number 401580, 410580, 400158 and 401508 in a descending order.
A. 400158, 401508, 401580, 410580
B. 400158, 401508, 401580, 410580
C. 410580, 401508, 401580, 400158
D. 410580, 401580, 401508, 400158 | <ol style="list-style-type: none"> 8. What is the sum of the LCM of 24 and 36 and the GCD of 42 and 48?
A. 72 B. 78
C. 6 D. 66 9. What is the next number in the number pattern below?
2½, 2⅓, 2⅕, 2⅐, _____

A. 2⅑₁₃ B. 2⅑₉
C. 2⅑₁₁ D. 4⅑₁₁ 10. A dairy company bought fifteen thousand, six hundred and eight litres of milk each day. How many litres of milk did the company by altogether in the month of August?
A. 483848 litres
B. 483884 litres
C. 438848 litres
D. 438488 litres 11. A farmer in Narok harvested 2140 bags of wheat from his farm. He used a lorry to transport wheat from his farm to Nairobi. If each trip a lorry carry 85 baggs, how may trips did the lorry make to transport all bags?
A. 25 trips
B. 27 trips
C. 25.18 trips
D. 26 trips 12. What is the value of;-
$\frac{1}{8} \div \frac{1}{4}$ of $\frac{1}{6} + (\frac{3}{10} - \frac{1}{5})$?

A. $\frac{11}{60}$ B. $\frac{31}{10}$
C. $\frac{55}{11}$ D. $\frac{10}{31}$ 13. A man spends $\frac{3}{8}$ of his salary on food, $\frac{1}{6}$ on clothing $\frac{1}{4}$ on other expenses and saved the rest. What fraction of his salary did he save?
A. $\frac{5}{24}$ B. $\frac{7}{16}$
C. $\frac{3}{8}$ D. $\frac{1}{4}$ 14. What is $(3\frac{3}{4})^2$?
A. $9\frac{9}{16}$ B. $6\frac{6}{8}$
C. $14\frac{1}{16}$ D. $15\frac{1}{16}$ |
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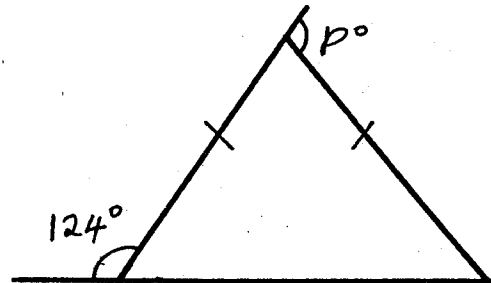
15. In the figure below. **PQ** is parallel to **RS**. Line **TU** and **VW** are transversal lines. Which of the following angles is equal to angle **M**?



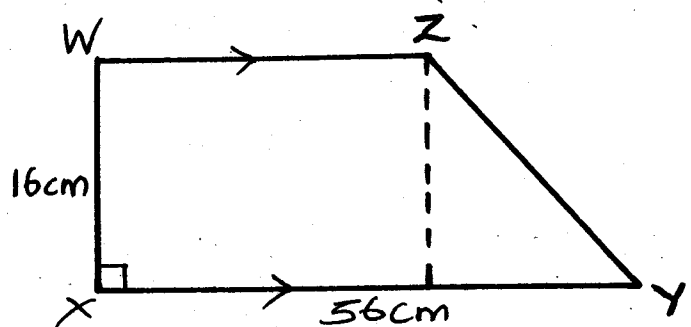
- A. q, i and g B. n, z and w
 C. x, s and i D. q, x and z
16. The following are properties of a certain quadrilateral;
 i) *Opposite angles and lines are equal*
 ii) *Had two pairs of parallel lines*
 iii) *The sum of interior angles adds up to 360°*
 iv) *Diagonals are varied and bisect each other at a right angle*
 Which of the quadrilateral below is being described?
 A. Trapezium B. Rhombus
 C. Rectangle D. Parallelogram
17. Which of the following numbers is divisible by 8?
 A. 42308 B. 56124
 C. 36552 D. 32428
18. Simplify; $\frac{5}{12}(72x - 60y) + \frac{3}{4}(20x + 28y)$
 A. $45x - 4y$ B. $45x + y$
 C. $45x - y$ D. $45 - 41y$
19. There are 50 chickens in a farm. In a week 32 of them lay m eggs each and the rest lay $(m + 5)$ eggs each. How many eggs are laid altogether in a week?
 A. $(32m + 160)$ eggs
 B. $(32m + 160)$ eggs
 C. $(50m + 250)$ eggs
 D. $(50m + 90)$ eggs
20. What is the value of $5(2x - 4y) + 2(y + z)$. If $x = 6, Y = 2$ and $Z = 3$?
 A. 20 B. 30
 C. 40 D. 50
21. The perimeter of a rectangle is 96cm. If the longer side of the rectangle is two times the length of the shorter sides. Find the area of a rectangle?
 A. 32cm^2 B. 12cm^2
 C. 512cm^2 D. 521cm^2

22. Simplify the inequality below;
 $3x + 2 > 18 - x$
 A. $x > 4$ B. $x > 10$
 C. $x < 4$ D. $x < 10$

23. What is the size of angle marked p in the figure below?

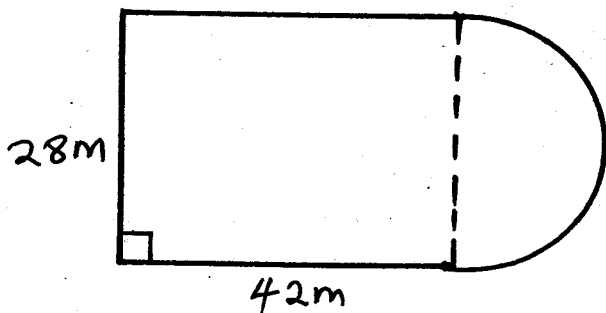


- A. 156° B. 112°
 C. 108° D. 116°
24. Construct triangle **RTW** in which line **RT** = 7cm, **RW** = 4cm and angle **WRT** = 130° . Draw a circle that touches point **R, T** and **W**. What is the radius of the circle?
 A. 1.7cm B. 13.6cm
 C. 3.4cm D. 6.8cm
25. The marked price of a jacket is Sh 2400. Davis bought the jacket after being allowed a discount of 15%. How much did he pay for the jacket?
 A. Sh 360 B. Sh 2100
 C. Sh 2040 D. Sh 300
26. The area of the trapezium **WXYZ** drawn below is 768cm^2 . Line **WZ** is parallel to **XY** and line **WX** is the perpendicular distance.



- What is the length of line **WZ**?
 A. 40cm B. 32cm
 C. 48cm D. 36cm
27. The longest side of a right angled triangle is 39cm. What are the possible lengths of the two shorter sides?
 A. 20cm and 19cm B. 15cm and 36cm
 C. 24cm and 12cm D. 30cm and 12cm

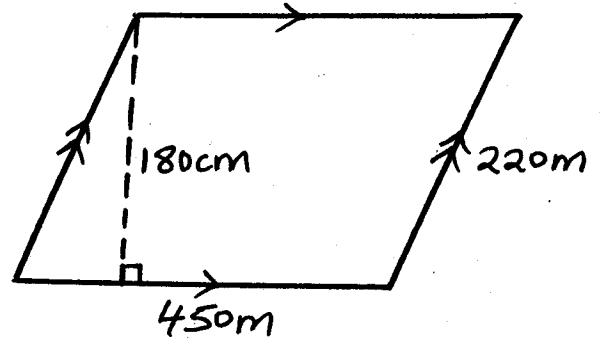
28. What is the total value of digit 7 in the product of 1.43 and 0.9?
 A. $\frac{7}{10000}$ B. $\frac{7}{10}$
 C. $\frac{7}{100}$ D. $\frac{7}{1000}$
29. Convert the fraction $\frac{8}{45}$ and give the answer correct to three decimal places.
 A. 0.178 B. 1.176
 C. 0.177 D. 0.179
30. What is the value of;- $\frac{6.4 \times 8.1}{2.7 \times 0.16}$
 A. 1.2 B. 12
 C. 1200 D. 120
31. A rectangular floor board measures 12.5m by 8m. The floor is covered completely with square tiles of 0.5m by 0.5m. How many tiles are required altogether?
 A. 40 B. 400
 C. 20 D. 200
32. Otis earns Sh 60000 in a month in the year 2021. In the year 2022, his salary a month increased by 18%. How much did he earn in a month in the year 2022?
 A. Sh 10800
 B. Sh 49200
 C. Sh 70800
 D. Sh 70000
33. A businessman borrowed Sh 160000 from a leading institution at a simple interest rate of 8% per month. How much did he pay at the end of two years?
 A. Sh 185600 B. Sh 186624
 C. Sh 25600 D. Sh 26624
34. Muraya's plot of land is made up of a rectangle and a semi-circular part as drawn in the figure below.



If he decided to fence his plot using three strands of wire all around, what length of wire did he require?

- A. 156m B. 468m
 C. 200m D. 600m

35. A new probox car cost Sh 950000. After five years its value will have depreciated by 26%. What is the value of the car after five years?
 A. Sh 247000 B. Sh 730000
 C. Sh 1197000 D. Sh 703000
36. The diagram below is a land in shape of parallelogram.



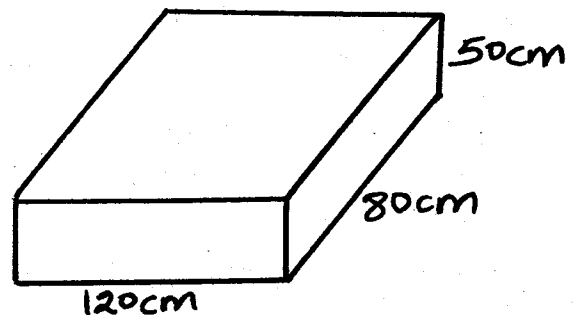
What is the area of the land in hectares?

- A. 9.9ha B. 1.05ha
 C. 8.1ha D. 8.45ha
37. The actual length of road from point A to B is 9.6km. What is the drawing length on a map if the scale of 1:80000 is used?
 A. 12cm B. 8cm
 C. 16cm D. 10cm
38. The table below shows the number of pupils absent from a class of 55 pupils in a certain week.

Day	Mon	Tue	Wed	Thur	Fri
Boys	5	2	8	2	4
Girls	3	4	3	2	5

What was the total attendance for that week?

- A. 38 B. 275
 C. 237 D. 313
39. The circumference of a circle is 88cm. Calculate the area of the circle.
 A. 2464cm² B. 616cm²
 C. 308cm² D. 154cm²
40. The diagram below is a block of wood.



Calculate the surface area of the block above.

- A. 480000cm² B. 46300cm²
 C. 27200cm² D. 39200cm²

41. A water tank is in the shape of a cylinder. Its height is 2.3 metres and a radius of 1.4m. What is the volume of the tank in cubic metres?

- A. 14.168m^3 B. 1.4168m^3
 C. 141.68m^3 D. 1416.8m^3

42. Kirumba was sent to the shop and bought the following items;

*$2\frac{1}{2}\text{kg}$ of sugar @ Sh 160.00
 2 - 2kg of maize flour @ Sh 120.00
 3 bars of soap for Sh 240.00
 4 - 500ml packets @ Sh 60.00*

How much did he pay for the items?

- A. Sh 1210 B. Sh 1460
 C. Sh 1120 D. Sh 950

43. The average mass of 42 Std 7 pupils is 52kg 500g. What is their total mass in tonnes?

- A. 0.2205 B. 220.5
 C. 22.05 D. 2.205

44. A trader bought onion at Sh 60 per kg. He later sold them at a profit of 30% per kg. How much did he sell a kilogram?

- A. Sh 18.00 B. Sh 78.00
 C. Sh 42.00 D. Sh 81.00

45. The marked price of a water pump is Sh 22000, Kimani bought it on hire purchase terms. He paid a deposit of Sh 4500 and then 11 equal monthly instalments of Sh 1800. How much more than the marked price did Kimani pay?

- A. Sh 2300 B. Sh 2200
 C. Sh 24300 D. Sh 5400

46. A train left Kisumu town of Friday on 9.30pm and took 9 hours 45minutes to reach Nairobi. At what time and day did it reach Nairobi in 24 hours clock system?

- A. 0715hrs, Friday
 B. 1915hrs, Friday
 C. 0715hrs, Saturday
 D. 0915hrs, Saturday

47. A sales agent is paid 8.5% commission for all the goods he sells in a month. In one month he sold goods worth Sh 360000, how much did he earn as a commission?

- A. Sh 36000
 B. Sh 24800
 C. Sh 42400
 D. Sh 30600

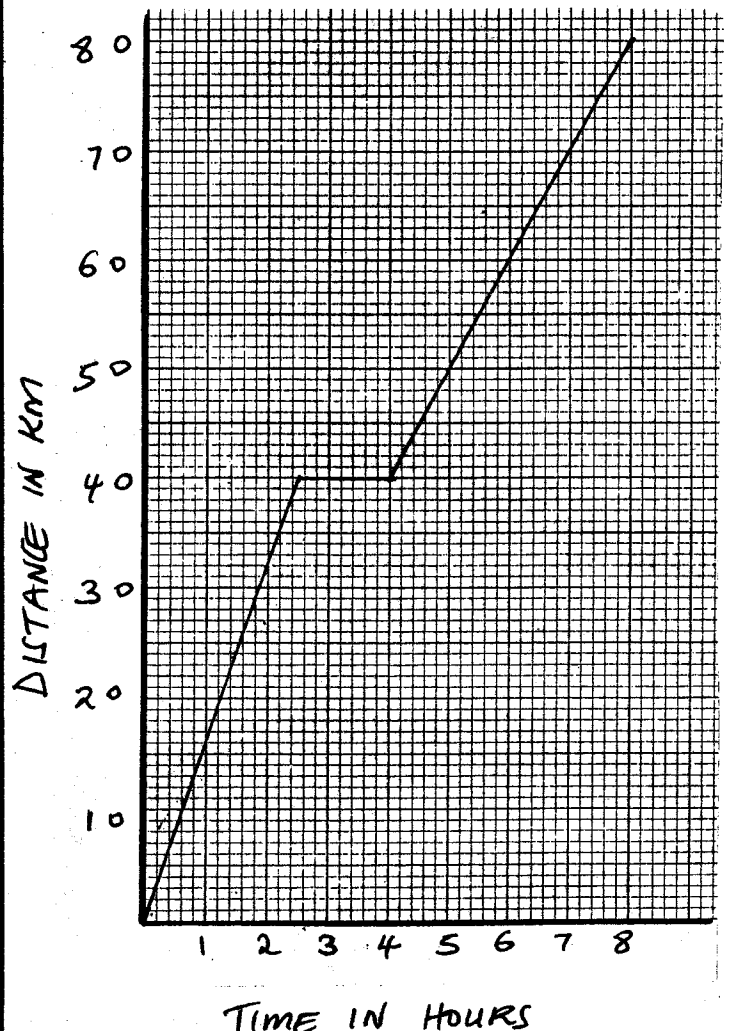
48. An open cylindrical tank measures 28m on diameter and a height of 2.5m. Calculate the surface area of the tank.

- A. 220m^2
 B. 836m^2
 C. 1540m^2
 D. 616m^2

49. What is the value of 9 litres 6dl 42ml x 8?

- A. 77L 1dl 36ml
 B. 72L 51dl 336ml
 C. 73L 5dl 33ml
 D. 72L 1dl 36ml

50. The travel graph below shows the journey covered by a cyclist between two stations a distance of 80km apart. The cyclist only stopped once in between the station.



What was his speed after stopping?

- A. 16km/hr
 B. 10km/hr
 C. 20km/hr
 D. 24km/hr