

# BRIGHT VISION SERIES

## STD 8 - YEAR - 2023

### MATHEMATICS

SASON  
003

#### READ THESE INSTRUCTIONS CAREFULLY

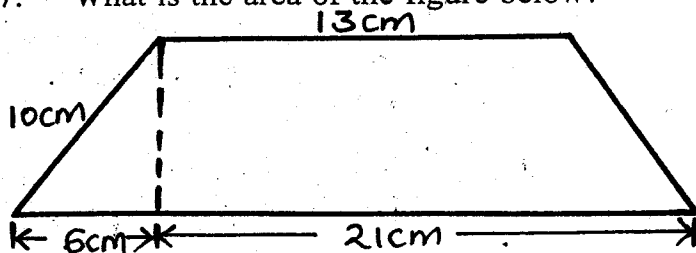
- 1 Use an ordinary pencil only.
- 2 Make sure that you have written on the answer sheet.

I. YOUR NAME

II. NAME OF YOUR SCHOOL

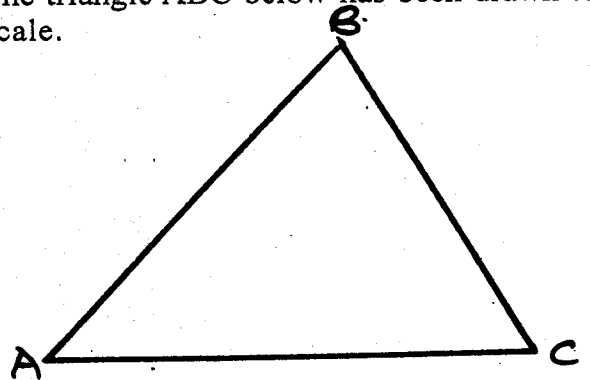
Time: 2 Hours

1. Which of the following numbers is three hundred and thirty thousand three hundred and thirty and thirty hundredth?  
A. 330330.330      B. 300330.30  
C. 330300.30      D. 330330.30
2. What is the value of;  
 $36 + 3(12 - 3^2) - 4 \times 6 \div 3?$   
A. 45      B. 37      C. 36      D. 53
3. What is the total value of digit 6 in the number 3865275?  
A. 600000      B. 60000  
C. 6000      D. 600
4. What is the value of;  
 $4(0.8^2 - 0.6^2) + 2.4 \div 0.6?$   
A. 15.2      B. 11.2      C. 5.12      D. 1.52
5. What is 65% expressed as a ration?  
A. 20:13      B. 100:65  
C. 65:100      D. 13:20
6. What is the sum of 2.865 and 12.968 rounded off to two decimal places?  
A. 15.833      B. 15.84  
C. 15.83      D. 15.80
7. What is the area of the figure below?



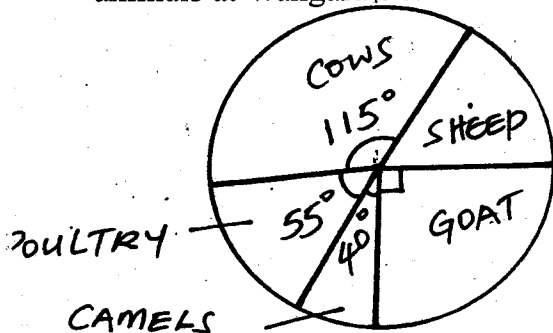
- A.  $160\text{cm}^2$       B.  $200\text{cm}^2$   
C.  $180\text{cm}^2$       D.  $240\text{cm}^2$
8. Wanjala delivered milk to Kajificheni hotel from 13th January 2022 to 12th April the same year. How many days did he deliver the milk?  
A. 90      B. 91      C. 92      D. 93
  9. The fractions  $\frac{2}{3}$ ,  $\frac{5}{8}$ ,  $\frac{5}{6}$  and  $\frac{3}{4}$  are to be arranged from the smallest to the largest. Which one of the following is the correct order?  
A.  $\frac{5}{6}$ ,  $\frac{3}{4}$ ,  $\frac{2}{3}$ ,  $\frac{5}{8}$       B.  $\frac{2}{3}$ ,  $\frac{3}{4}$ ,  $\frac{5}{6}$ ,  $\frac{5}{8}$   
C.  $\frac{5}{8}$ ,  $\frac{2}{3}$ ,  $\frac{3}{4}$ ,  $\frac{5}{6}$       D.  $\frac{5}{8}$ ,  $\frac{5}{6}$ ,  $\frac{3}{4}$ ,  $\frac{2}{3}$

10. Three street lights are flashing after 12 min, 15 min and 18 min respectively. If they flashed together at 8.30pm, at what time will they flash together again?  
A. 8.33pm      B. 5.30pm  
C. 8.27pm      D. 11.30pm
11. What is the value of;  
 $(\frac{2^2}{3} + \frac{1^2}{6} + 1\frac{1}{2} \div \frac{3}{2}) \times 2?$   
A. 10      B.  $10\frac{1}{3}$   
C.  $4\frac{3}{2}$       D.  $9\frac{2}{3}$
12. The triangle ABC below has been drawn to scale.



- What is the size of angle BAC?  
A.  $65^\circ$       B.  $72^\circ$   
C.  $51^\circ$       D.  $64^\circ$
13. Karim used  $\frac{1}{8}$  of his salary on food,  $\frac{1}{3}$  on savings,  $\frac{1}{4}$  on school fees and the rest on transport. If he spent Sh 5600 on transport, how much was the salary?  
A. Sh 9600      B. Sh 19200  
C. Sh 14400      D. Sh 24000
  14. Ome Saruni harvested 800 bags of wheat in the year 2020. In the year 2021 he harvested 960 bags. He sold all the bags at Sh 2400 per bag. How much money did he get for the two harvests?  
A. Sh 1760      B. Sh 1920000  
C. Sh 4224000      D. Sh 2304000
  15. A circular plot of land has a circumference of 176m. What is its area?  
A.  $2464\text{m}^2$       B.  $616\text{cm}^2$   
C.  $15400\text{m}^2$       D.  $9856\text{m}^2$

16. The pie chart below shows the number of animals at Wangara's farm.

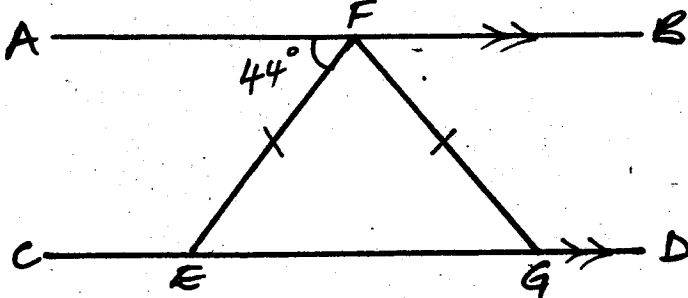


- If there were 230 cows. How many sheep are there in the farm?  
 A. 80    B. 180    C. 120    D. 160
17. What is the value of X in the equation?  
 $\frac{3}{4}(4x + 8) + 8 = 29$   
 A. 5    B.  $6\frac{2}{3}$     C.  $8\frac{2}{3}$     D.  $14\frac{1}{3}$
18. Kipkirui travelled from Litein to Bomet a distance of 180km from 7.00am to 9.00pm. He stayed at Bomet for 1 hour and then drove back to Litein arriving at 11.30am. What was the average speed of the whole journey?  
 A. 90km/hr    B. 80km/hr  
 C. 60km/hr    D. 120km/hr
19. A pick up has a empty mass 1.25 tonnes. It is loaded with 40 cartons each holding 12 - 2kg tins of cooking fat, 24 bales of wheat flour each bale holding 12-2kg packets. It is also loaded with 20-25kg bags of rice. What is the mass of the loaded pick up in tonnes?  
 A. 3286 tonnes    B. 3.286 tonnes  
 C. 2036 tonnes    D. 2.036 tonnes
20. The table below shows the number of crates of bread sold at chocolate shop Isinya. The number for Thursday is not shown.

Mon	Tue	Wed	Thur	Fri	Sat	Sun
24	36	18	-	28	34	48

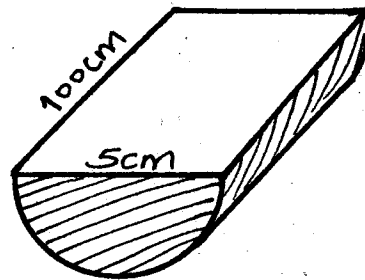
- One crate holds 15 breads. If she got a total of Sh 163500 from the sales of breads that week, how many crates did they sell on Thursday. If each bread retailing at Sh 50?  
 A. 25    B. 40    C. 22    D. 30

21. Line AB and line CD are parallel lines. Angle AFE = 44°. Line EF = FG.



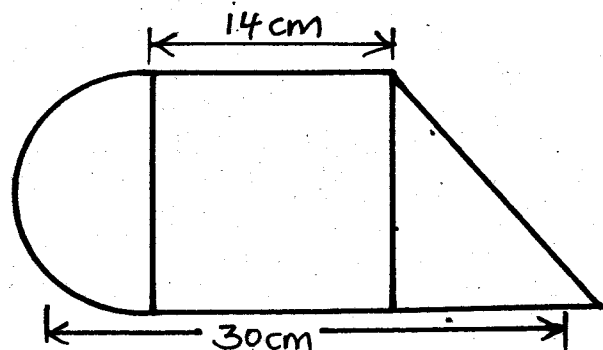
What is the size of angle GFB?

- A. 44°    B. 88°    C. 69°    D. 23°
22. A sales person is paid a basic salary of Sh 18000 and 5% commission on all the sales she makes. In one month, she sold goods worth Sh 250000. How much money did she earn that month?  
 A. Sh 12500    B. Sh 18000  
 C. Sh 30500    D. Sh 28500
23. The diagram below shows a water trough.



The water trough is filled with water. What is its capacity in litres?

- A. 1223L    B. 123200L  
 C. 123.2L    D. 12.32L
24. What is the square root of  $\sqrt{0.0256}$ ?  
 A. 0.16    B. 0.04    C. 0.0016    D. 0.4
25. Construct an equilateral triangle ABC such that line AB=BC= AC = 7cm. Bisect angle ABC and angle BAC. Let the bisector meet at point O. With O as the centre, draw a circle touching the sides ABC. What is the length of the radius of the circle?  
 A. 4cm    B. 4.5cm    C. 2cm    D. 9cm
26. Wachira bought x mangoes. Hassan bought three times as many mangoes as Wachira. Achieng bought 6 more mangoes than Hassan bought. How many mangoes did they buy in total?  
 A.  $7x + 6$     B.  $3x + 12$   
 C.  $7x - 6$     D.  $x + 9$
27. The figure below shows a square joined to a semicircle to the left and a triangle to the right.



What is the area of the figure?

- A. 462cm<sup>2</sup>    B. 598cm<sup>2</sup>  
 C. 693cm<sup>2</sup>    D. 385cm<sup>2</sup>

28. Halima bought a camel at Sh 80000. Due to drought she sold it making 12% loss. What was the selling price of the camel?  
 A. Sh 70400      B. Sh 9600  
 C. Sh 89600      D. Sh 12400
29. 12 men can do a certain job in 18 days. How many more men are needed to complete the job in 9 days?  
 A. 24      B. 12      C. 18      D. 36
30. Three contestant vied for party nomination and they scored as follows. The third candidate got 0.12 of the votes. The winning candidate got 0.48 of the votes. If the second candidate got 14000 more votes than the third candidate, how many people voted for the winning candidate?  
 A. 50000      B. 6000  
 C. 24000      D. 20000
31. A road on a map is represented by 6cm. What is the scale used if the actual distance is 30km?  
 A. 1:500      B. 1:5000  
 C. 1:50000      D. 1:500000
32. A Malindi bound bus left Garissa on Monday 2235hrs. If the journey took 12hrs 15min. On which day and time the bus got to Malindi in 12hrs system?  
 A. Tuesday 10.50pm  
 B. Tuesday 10.50am  
 C. Wednesday 10.50pm  
 D. Wednesday 10.50am
33. The table below shows the price of food at Chakula Kitamu Hotel.

	Beef	Kuku	Fish
Ugali	220	280	350
Kienyeji	250	320	400
Mchele	180	260	300
Chapati	160	220	260

A group of seven people went for lunch at the hotel and ate as follows:-

- 2 ate ugali beef  
 2 kienyeji kuku  
 2 chapati kuku

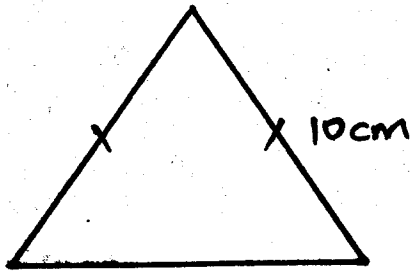
The last one ate mchele beef. How much money did they pay for lunch?

- A. Sh 1700      B. Sh 940  
 C. Sh 810      D. Sh 1260
34. What is 28042 divided by 14?  
 A. 23      B. 203  
 C. 2003      D. 20003
35. The hire purchase price of a generator is Sh 160000. The payment include a deposit and 18 equal monthly instalment of Sh 6000.

How much deposit is required for the generator?

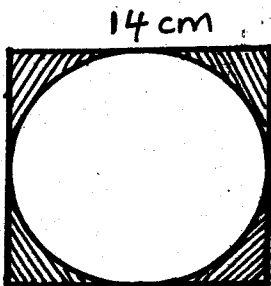
- A. Sh 108000      B. Sh 62000  
 C. Sh 68000      D. Sh 52000
36. The length of a rectangular plot is 120m. If the perimeter of the plot is 340m. What is the length of its diagonal?  
 A. 50m      B. 120m  
 C. 150m      D. 130m
37. What is the value of;  $\frac{2x + y}{z}$   
 when  $z = 4$ ,  $x = y + 2$  and  $y = 2z + 1$ ?  
 A. 3      B.  $4\frac{3}{1}$       C.  $7\frac{3}{4}$       D. 7
38. A school has 360 pupil. Each pupil is given 2 - 2dl packet of milk every week. How many litres do they consume in four weeks?  
 A. 5760L      B. 576L  
 C. 1440L      D. 144L
39. Eleven pupils scored the following marks in a test; 59, 63, 38, 78, 55, 65, 86, 68, 74, 48 and 54. What was the mean mark for the eleven pupils?  
 A. 54      B.  $64\frac{6}{11}$   
 C.  $62\frac{6}{11}$       D. 63
40. A shopkeeper had the following demoninations in his cash box.  
 Sh 1000 - 12 notes  
 Sh 500 - 8 notes  
 Sh 200 - 24 notes  
 Sh 100 - 15 notes  
 He decided to change all the money into Sh 50 notes. How many notes did he get?  
 A. 4460      B. 446  
 C. 22300      D. 223
41. A rectangular box measures 70cm by 56cm by 40cm. How many cylindrical containers of radius 7cm and a height of 10cm can be packed in the box?  
 A. 80      B. 40  
 C. 120      D. 160
42. Wasike deposited Sh 96000 in a commercial bank that paid a simple interest at the rate of 8% per annum. How much interest did the money earn at the end of second year?  
 A. Sh 1680      B. Sh 103680  
 C. Sh 111360      D. Sh 15360
43. At Three bells Academy the number of pupils increased by 72 pupils in the year 2022. If this was 12% increase from the year 2021. How many pupils were there in school in the year 2021?  
 A. 600      B. 672  
 C. 528      D. 648

44. The figure below shows an isosceles triangle.



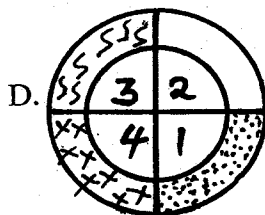
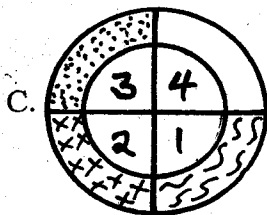
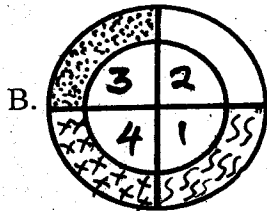
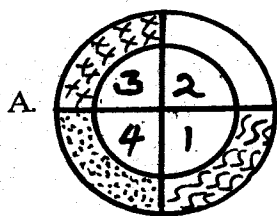
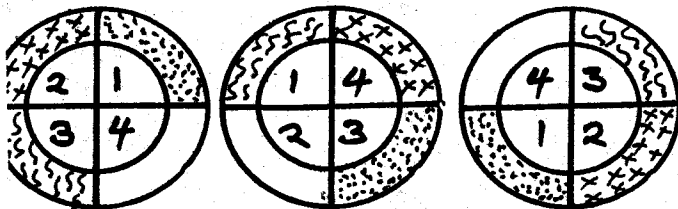
What is the area of the triangle?

- A.  $96\text{cm}^2$       B.  $120\text{cm}^2$   
 C.  $48\text{cm}^2$       D.  $60\text{cm}^2$
45. The figure below shows a circle cut out from a square.

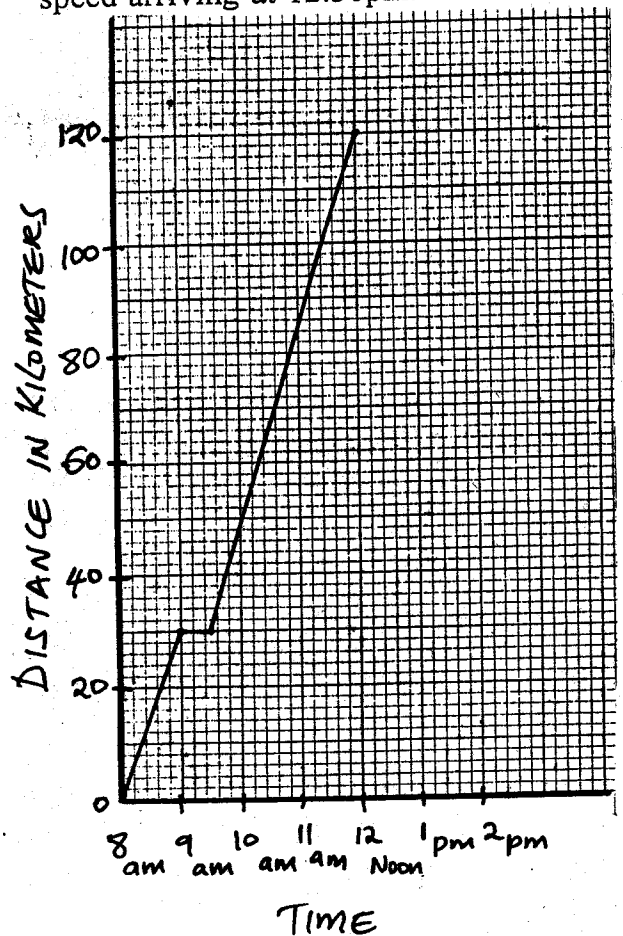


What is half the area of the shaded part?

- A.  $616\text{cm}^2$       B.  $784\text{cm}^2$   
 C.  $168\text{cm}^2$       D.  $84\text{cm}^2$
46. Which of the following is the next shape in the pattern?



47. A driver earns Sh 14025 after working for 17 days. How many does he earn after working for 12 days?  
 A. Sh 825      B. Sh 9900  
 C. Sh 8700      D. Sh 725
48. Shakababa paid Sh 1900 for an item after getting a 5% discount. How much was the marked price?  
 A. Sh 2100      B. Sh 2000  
 C. Sh 1805      D. Sh 1905
49. What is the product of edges and vertices of a triangular prism?  
 A. 45      B. 15  
 C. 14      D. 54
50. The graph below shows the journey by Ntapaiya from Ngong to Kajiado a distance of 120km. After travelling for one hour the vehicle broke down taking 30 min to repair. He continued with the journey at an average speed arriving at 12.30pm.



What was the average speed for the remaining part of journey?

- A. 30km/hr      B. 45km/hr  
 C. 60km/hr      D. 262/3km/hr