

1. The value of  $8 - 2 \times \frac{9}{4} + 9 \div \frac{3}{2}$  is

A  $3\frac{2}{3}$   
 B  $9\frac{1}{2}$   
 C  $19\frac{1}{2}$   
 D  $22\frac{1}{2}$

2. The L. C. M. of 3, 4, 6 and 9 is

A 108  
 B 72  
 C 36  
 D 24

3. The following numbers  $2^2$ ,  $-6$ ,  $\frac{25}{4}$ ,  $\sqrt{27}$  when arranged in ascending order is

A  $-6, 2^2, \sqrt{27}, \frac{25}{4}$   
 B  $-6, \sqrt{27}, 2^2, \frac{25}{4}$   
 C  $-6, 2^2, \frac{25}{4}, \sqrt{27}$   
 D  $\frac{25}{4}, \sqrt{27}, 2^2, -6$

4. Water at  $-7^\circ\text{C}$  is allowed to attain room temperature of  $23^\circ\text{C}$ . The rise in temperature is

A  $-30^\circ\text{C}$   
 B  $-16^\circ\text{C}$   
 C  $16^\circ\text{C}$   
 D  $30^\circ\text{C}$

5. The number 0.00746 estimated to two significant figures is

A 0.01  
 B 0.0074  
 C 0.0075  
 D 0.0070

6. 0.52 is equivalent to the fraction

A  $\frac{13}{25}$   
 B  $\frac{13}{250}$   
 C  $\frac{1}{2}$   
 D  $\frac{1}{20}$

7. Douala and New Delhi are 1 hour and 8 hours respectively from the mean time of zero hour. A plane that leaves Douala at 10.00 p.m. arrives New Delhi at

A 5 p.m.  
 B 5 a.m.  
 C 7 p.m.  
 D 7 a.m.

05/570 1/A

G✓ 8.

A retailer makes a profit of 20% by selling a tray of eggs at 1500FCFA. The cost price, in FCFA, of the tray of eggs is

- A 1 200
- B 1 250
- C 1 550
- D 1 875

G✓ 9.

The height of a plant increased by  $12\frac{1}{2}\%$ . The ratio of the initial height to the increase is

- A 5:4
- B 1:8
- C 8:1
- D 7:8

G✓ 10.

The length of a rectangle is twice its width. Given that its perimeter is 30cm, the width, in cm, is then

- A 5
- B  $7\frac{1}{2}$
- C 10
- D 15

G✓ 11.

The width of the base of a cuboid is 2cm. Given that the length is three times the width and that the volume of this cuboid is  $144\text{cm}^3$ , its height, in cm, should then be

- A 9
- B 6
- C 18
- D 12

G✓ 12.

The length of an arc of a sector of a circle is 11cm. Given that the radius of the circle 7cm and taking  $\pi$  as  $\frac{22}{7}$ , then the angle the arc subtends at the centre of the circle is

- A  $180^\circ$
- B  $90^\circ$
- C  $45^\circ$
- D  $12\frac{6}{7}^\circ$

G✓ 13.

Given three sets defined in  $\square$ , the set of real numbers, as

$E = \{\text{Factors of } 20\}$

$F = \{\text{Multiples of } 5 \text{ less than } 15\}$

$G = \{\text{Multiples of } 3 \text{ less than } 20\}$

Which of the following statement is false?

- A  $F \cup E = F$ ,
- B  $F \cap G = \phi$
- C  $15 \in F$
- D  $F \subset E$



4

G 14.

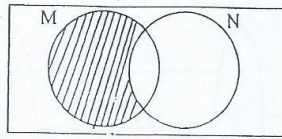


Figure 1

In figure 1, the shaded region in the Venn diagram represents

- A  $M \cap N'$
- B  $M' \cap N'$
- C  $M' \cup N'$
- D  $M' \cup N$

G 15.

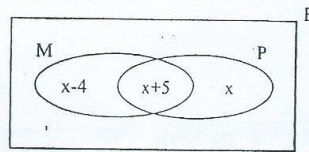


Figure 2

In figure 2, the Venn diagram shows the number of students who offer Mathematics or Physics or both in a science class. Given that all 58 students in the class offer at least one of these subjects, the number who offer Mathematics only is:

- A 15
- B 19
- C 24
- D 39

16. Expressed as a single fraction,  $\frac{x}{2} - \frac{(x+4)}{3}$  is

- A  $\frac{5x-8}{6}$
- B  $\frac{x-4}{6}$
- C  $\frac{x+8}{6}$
- D  $\frac{x-8}{6}$

17.  $\frac{x^2 - 9}{x^2 + x - 6}$  is simplified to

- A  $\frac{x+3}{x+2}$
- B  $\frac{x-3}{x-2}$
- C  $\frac{3}{x-2}$
- D  $\frac{9}{x-6}$

05/570/1/A

7

30. The equation of the line which is perpendicular to the line  $3y = x + 10$  and has y-intercept 4 is

- A  $3y = x + 12$
- B  $3y = x + 4$
- C  $y = 3x + 4$
- D  $y = -3x + 4$

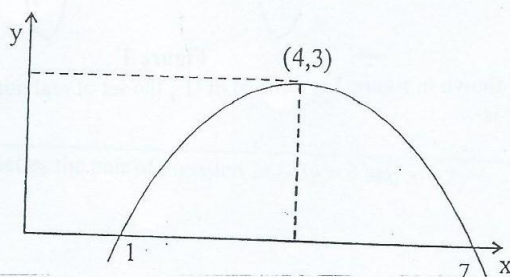


Figure 4.

31. The equation of the curve shown in figure 4 is

- A  $y = (x + 1)(x + 7)$
- B  $y = (x - 1)(x - 7)$
- C  $y = (x + 3)(x + 4)$
- D  $3y = 4x$

32.

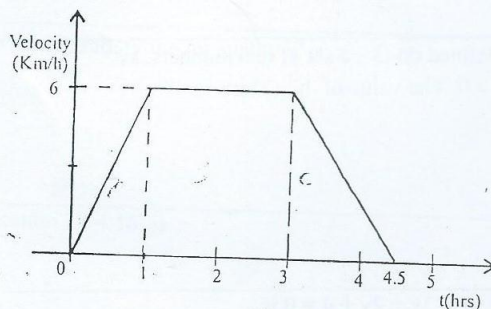


Figure 5

Figure 5 shows the velocity – time graph of the movement of a cyclist between two towns. The distance, in km, between these towns is

- A  $13\frac{1}{2}$
- B  $14\frac{1}{2}$
- C  $19\frac{1}{2}$
- D 27



8

G 33.

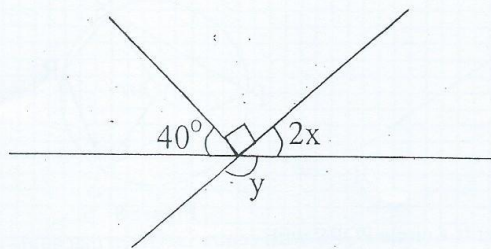


Figure 6

The value of  $y$  in figure 6 is

- A  $130^\circ$
- B  $115^\circ$
- C  $90^\circ$
- D  $50^\circ$

G 34.

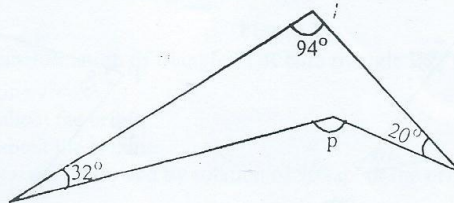


Figure 7

In figure 7, the angle marked  $p$  has a value of

- A  $94^\circ$
- B  $126^\circ$
- C  $144^\circ$
- D  $146^\circ$

G 35.

The quadrilateral PQRS has sides of equal length and has rotational and point symmetries. The quadrilateral could be

- A Kite
- B Rhombus
- C Parallelogram
- D Rectangle

G 36

One angle of a pentagon is  $100^\circ$  and all the other angles are equal. The value of each of the other angles is

- A  $110^\circ$
- B  $88^\circ$
- C  $65^\circ$
- D  $52^\circ$

G 37.

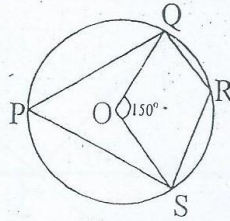


Figure 8

Figure 8 represents a circle PQRS with centre O. Given that angle QOS =  $150^\circ$ , the value of the angle QRS is

- A  $165^\circ$
- B  $120^\circ$
- C  $105^\circ$
- D  $75^\circ$

G 38.

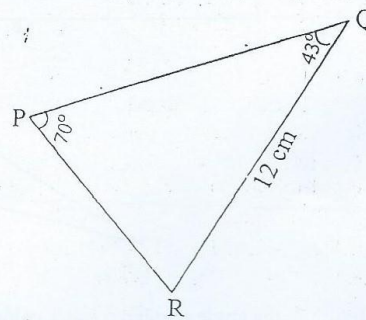
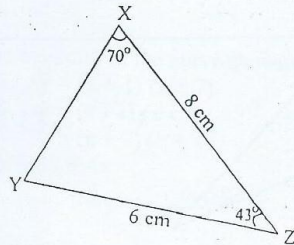


Figure 9

Given that triangles XYZ and PQR in figure 9 are similar, the length of PQ, in cm, is

- A 4
- B 9
- C 10
- D 16

G 39.

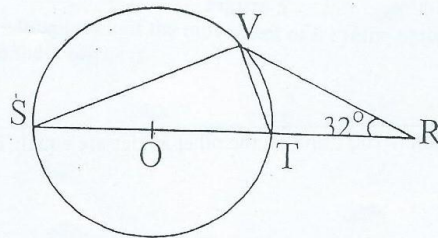


Figure 10

Figure 10 represents a circle of centre O, with  $VT = TR$  and angle  $VRT = 32^\circ$ . The value of angle VST is

- A  $26^\circ$
- B  $28^\circ$
- C  $32^\circ$
- D  $58^\circ$



40.

10

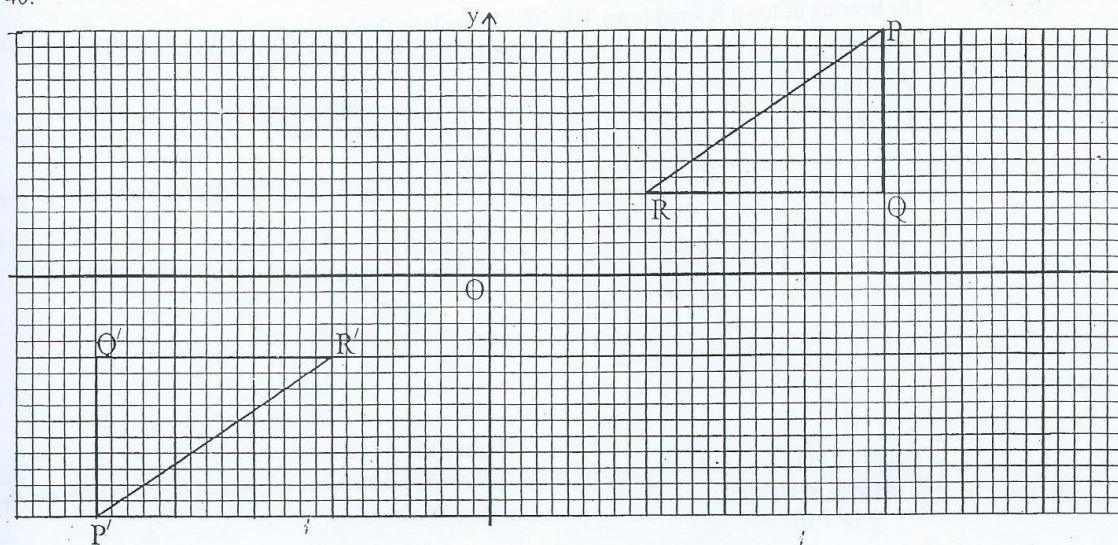


Figure 11

Figure 11 represents a transformation of triangle PQR onto triangle P'Q'R'. This transformation is

- A Reflection in the line  $y = -x$
- B Rotation of  $180^\circ$  about the origin
- C Rotation of  $270^\circ$  about the origin
- D Reflection in the  $x$  - axis followed by rotation of  $90^\circ$  about the origin

41.

Given a right-angled triangle PQR in which angle PQR =  $90^\circ$  and  $\sin \angle RPQ = \frac{5}{13}$ , then the value of  $\tan \angle QRP$  is

- A  $\frac{5}{12}$
- B  $\frac{12}{13}$
- C  $\frac{13}{12}$
- D  $\frac{12}{5}$

42.

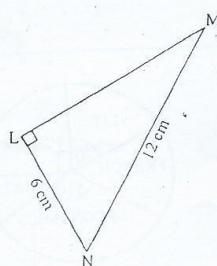


Figure 12

Figure 12 shows a right-angled triangle LMN. Given that  $LN = 6$  cm and  $MN = 12$  cm, the length of LM, in cm, is

- A 6
- B  $6\sqrt{3}$
- C  $3\sqrt{10}$
- D 16

05/5701/A

43. The bearing of town R from town T is  $50^\circ$ . Therefore, the bearing of town T from R is
- A  $040^\circ$
  - B  $050^\circ$
  - C  $130^\circ$
  - D  $230^\circ$

44.

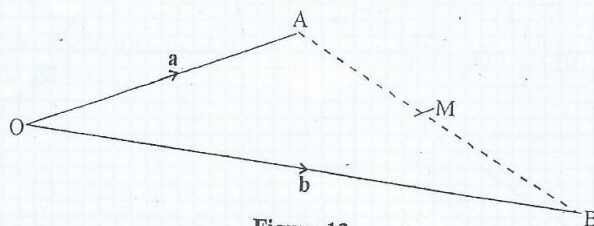


Figure 13

In figure 13,  $OA = a$ ,  $OB = b$  and M is the midpoint of AB. When expressed in terms of a and b,  $AM$  is equal to

- A  $\frac{1}{2}(a + b)$
- B  $\frac{1}{2}(a - b)$
- C  $-\frac{1}{2}(a - b)$
- D  $-a - b$

45. The position vector of the points P and Q are respectively  $OP = 6i - j$  and  $OQ = 2i + 2j$ . The modulus of PQ is

- A  $\sqrt{65}$
- B 5
- C 3
- D  $\sqrt{7}$

46. The mean mark of a test for 12 students is 60. Given that the mean score of ten of the students is 65, the mean mark for the remaining two students is then

- A 70
- B 60
- C 45
- D 35

47.

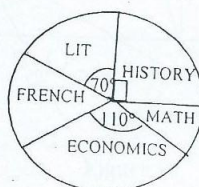


Figure 14

Figure 14 is a pie chart indicating the favorite subjects of 120 students in a certain class. Given that twice as many students like Mathematics as French, the angle of the sector for Mathematics is

- A  $60^\circ$
- B  $50^\circ$
- C  $45^\circ$
- D  $30^\circ$



48. The median of the following numbers 5, 10, 8, 2, 3, 7 is
- A 8
  - B 6
  - C 5
  - D 2
- 
49. A club had 8 women and 10 men. After two couples and 3 single men left on transfer, the probability that the president is a male is
- A  $\frac{5}{11}$
  - B  $\frac{3}{11}$
  - C  $\frac{5}{9}$
  - D  $\frac{3}{18}$
- 
50. Boris has three pairs of black socks and two pairs of green socks. Given that he dressed up in the dark, the probability that he puts on socks of different colours is
- A  $\frac{4}{11}$
  - B  $\frac{6}{15}$
  - C  $\frac{8}{15}$
  - D  $\frac{13}{30}$
-