Section A

(Questions 1 to 12 carry 1 mark each)

1. 56% is equal to the decimal number

A. 5.60

B. 0.56

C. 56.0

D. 0.056

2. Which of the following rational numbers is in the standard form?

A. $\frac{15}{-63}$

B. $\frac{36}{25}$

C. $\frac{-8}{30}$

D. $\frac{24}{33}$

3. A triangle has _____ components.

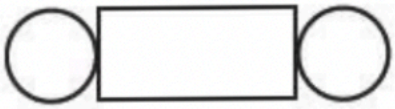
A. 3

B. 4

C. 5

D. 6

4. Name the solid, whose net is shown below:



A. Cylinder
B. Cone
C. Sphere
D. Rectangle

5. Which of the following is an example of binomial?

A. $3x$
B. $-x + 1$
C. $2x^2 + x + 1$
D. $x^4 + x - 1$

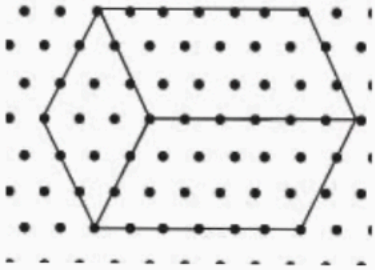
6. $\frac{16}{25}$ in exponential form is

A. $\frac{4^3}{5^2}$
B. $\frac{4^2}{5^3}$
C. $\frac{2^4}{5^2}$
D. $\frac{2^3}{5^2}$

7. English alphabet "Z" has rotational symmetry of order _____.

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

8. The length of following cuboid is:



A. 3 units
B. 2 units
C. 6 units
D. 4 units

9. $\frac{11^{10}}{11^{6}}$ =

A. 10^{16}

B. 10^{4}

C. 11^{16}

D. 11^{4}

10. Rhombus has a perimeter of 28 cm, then what will be the length of its side?

A. 7 cm

B. 4 cm

C. 16 cm

D. 14 cm

11. (128 ÷ 32) ÷ (-4) =

A. -1

B. 2

C. -3

D. -4

12. The first step that we will use to separate variables and constants in the linear equation 2x + 3 = 7 is

A. Transposing 3 to RHS

B. Transposing 7 to LHS

C. Diving both sides by 2

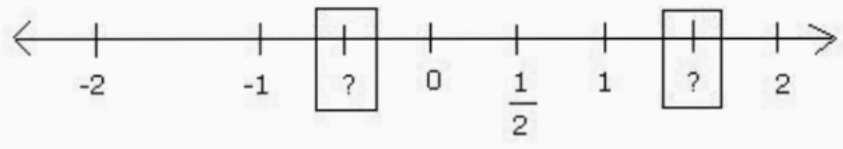
D. Multiplying both sides with 3

Section B

(Questions 13 to 24 carry 2 marks each)

13. Rahul has got 40 marks out of 50 in his math exam while Rohan has got 75 out of 100. Who scored more marks?

14. Find the missing values in the number line below:

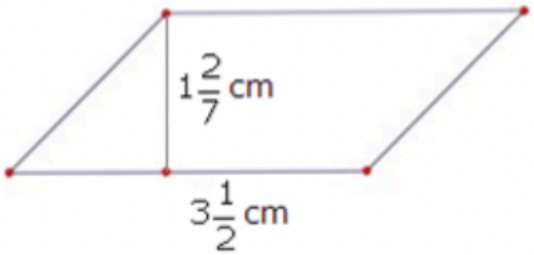


15. Is it possible to construct a triangle with the following given elements? Why or why not?

a) $\angle A = 120^{o}$, $\angle B = 90^{o}$ and AB = 8 cm.

b) $\angle P = 90^{o}$, $\angle Q = 90^{o}$ and PQ = 9 cm.

16. Find the area of the given parallelogram.



17. Add the following expressions:
6m - 7n - 5p, -4m - 9n + 6p, -4m - 9n + 6p

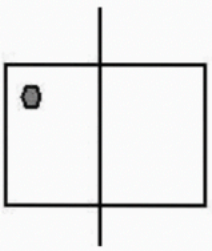
18. Write the following in expanded form:

(i) $\left(\frac{-7}{9}\right)^3$

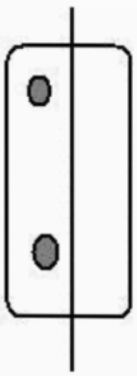
(ii) $\left(\frac{5}{8}\right)^6$

19. Given the line of symmetry, find the other hole(s) in the following figures.

i.



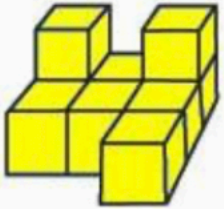
ii.



20. Draw a cuboid of dimensions 5 units x 3 units x 6 units on an isometric dot sheet.

21. Mass of earth is approximately 5,970,000,000,000,000,000,000,000 kg. Express this mass in standard form.

22. Count the number of cubes in the following solid.



23. In a cricket match, the runs scored by 11 players are as follows:
12, 23, 10, 77, 15, 78, 90, 54, 23, 10 and 1
Find the average score.

24. Find the value of the following expression using suitable property:
$725 \times (-35) + (-725) \times 65$