

PT-1 (2024-25)
CLASS -VIII

Time: 90 minute.

M.M: 40

Section -A. $1 \times 10 = 10$

Choose the correct answer out of the four options.

1. If x , y and z are three non-zero rational numbers, then which of the following is incorrect?

- (a) $x - y = y - x$
- (b) $(x + y)$ is a rational number
- (c) (x / y) is a rational number
- (d) $(x - y)$ is a rational number

2. $-3/19$ is a

- (a) positive rational number
- (b) negative rational number
- (c) either positive or negative rational number
- (d) neither positive nor negative

3. $(-3/4) - (-1/3)$ is

- (a) $-4/12$
- (b) $3/4$
- (c) $-5/12$
- (d) $-16/12$

4. If sum of two rational numbers is -6 and one of them is $-7/2$ then the other number is

- (a) $-5/2$ (b) $5/2$ (c) $-19/2$ (d) $19/2$

5. $2x + 4 = x - 5$ then value of x is

- (a) -9 (b) 8 (c) 9 (d) 5

6. $2x - 3 = x + 2$ then the value of x is

- (a) 5 (b) 8 (c) 4 (d) 2

7. Which of the following is not a linear equation in one variable?

(a) $4x + 7 = 0$

(b) $3m - 4 = m$

(c) $m + 5n = 9$

(d) $2(y - 4) + 6 = 0$

8. Sum of the angles of a quadrilateral is

(a) 180°

(b) 270°

(c) 160°

(d) 360°

9. Diagonals of a rhombus bisect each other at

(a) acute angle

(b) obtuse angle

(c) right angle

(d) $\frac{1}{2}$ right angle

10. A ABCD is quadrilateral called a if it has equal sides and equal angles.

(a) rectangle

(b) trapezium

(c) square

(d) None of these

Section -B. $1 \times 5 = 5$

Q(11-15) Fill in the blanks :

Q11 All the interior angles of a rectangle are.....

Q12 . The diagonals of a square are perpendicular to.....

Q.13. Linear equation is one whose maximum power is.....

Q14 1 is called..... identity of rational numbers.

Q15 . The process of finding all the solutions of an equation is called.....

Section -c $2 \times 10 = 20$

Q (16-20). Case study based questions

Read the following text carefully

Mrs. sapna asked the students of her class to throw two dice simultaneously. She asked them to note down the possible outcomes. The students have written the possible outcomes as follows
possible outcomes = $\{(1,1), (1,2), (1,3), (1,4), (1,5), (1,6), (2,1), (2,2), (2,3), (2,4), (2,5), (2,6), (3,1), (3,2), (3,3), (3,4), (3,5), (3,6), (4,1), (4,2), (4,3), (4,4), (4,5), (4,6), (5,1), (5,2), (5,3), (5,4), (5,5), (5,6), (6,1), (6,2), (6,3), (6,4), (6,5), (6,6)\}$

Q16. The probability of getting 8 as the sum is

Q17. The probability of getting a doublet of prime numbers is

Q18. The probability of getting neither 9 nor 11 as the sum of the numbers on the faces is

Q19. The probability of getting an even number on one and a multiple of 3 on the other is

Q20. The probability of getting a number other than 5 on any dice is

Questions solve :

Q21 . How many sides does a regular polygon have if the measure of an exterior angle is 24° ?

Q22. Find the measure of each exterior angle of a regular polygon of

(i) 9 sides. (ii) 15 sides

Q(23-24) Solve the following questions and check your results .

Q23 $4z+3 = 6+2z$

Q.24 $5x+9 = 5+3x$

Q25 . Find $\frac{2}{5} \times \frac{3}{7} - \frac{1}{14} - \frac{3}{7} \times \frac{3}{5}$

Section -D. $2.5 \times 2 = 5$

Q(26-27) Solve the following Linear equations

26. $\frac{(3t - 2)}{4} - \frac{(2t + 3)}{3} = \frac{2}{3} - t$

27. $m - \frac{(m - 1)}{2} = 1 - \frac{(m - 2)}{3}$