

I. Four alternatives are given for each of the following questions. Only one of them is correct or most appropriate. Choose the correct alternative and write the complete to answer along with its alphabet.

4 x 1 = 4

- The additive identity for rational numbers is _____.
a) 4 b) -1 c) 1 d) 0
- In the given linear equation $2x - 3 = 7$ the value of x is _____.
a) 10 b) 5 c) -2 d) 2
- The sum of the measure of exterior angles in any polygon is _____.
a) 90° b) 180° c) 270° d) 360°
- The total angle at the centre of a circle is _____.
a) 360° b) 180° c) 90° d) 60°

II. ANSWER THE FOLLOWING QUESTIONS.

4 x 1 = 4

- Which is the smallest perfect square number?
- List out the cube of numbers from 1 to 5.
- The measure of each angle in rectangle is _____.
- Find the product of $\frac{-2}{3} \times \frac{4}{5}$

III. ANSWER THE FOLLOWING QUESTIONS.

6 x 2 = 12

- Solve the left-hand side and right-hand side of the problem to test addition,

commutative property of the Rational number $2\frac{1}{4} + \frac{3}{2} = \frac{3}{2} + 2\frac{1}{4}$

- Solve $6m - 5 = 4m + 11$
- Write any two properties of square.

or

Write any two properties of rectangle.

- Represent the given data in a Bar graph using an appropriate scale:

Favorite food	Number of people
North Indian	30
South Indian	40
Chinese	25
Others	25

or

Observe the following pictograph and answer the following.

- (i) How many cars were produced in the month of July?
- (ii) In which month were maximum number of cars produced?

 = 100 CARS  = 50 CARS	NUMBER OF PEOPLE
JULY	  
AUGUST	  
SEPTEMBER	   

13. Write the Pythagorean triplet whose smallest member is 8.
14. Find the cube root of 13824 by prime factorization method.

IV. ANSWER THE FOLLOWING QUESTIONS.

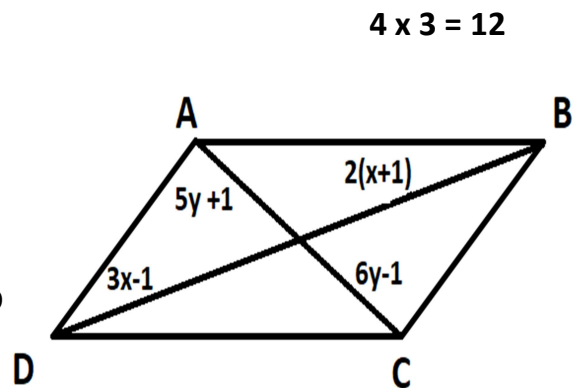
15. Find the value of: $\frac{-4}{5} \times \frac{3}{7} \times \frac{15}{16} \times \frac{-14}{9}$

or

Find the value of : $\frac{2}{5} \times \frac{-3}{7} - \frac{1}{14} - \frac{3}{7} \times \frac{3}{5}$

16. Find the value of x and y in the parallelogram ABCD

or



Two adjacent angles of a parallelogram are $(3x - 4)^\circ$ and $(3x + 10)^\circ$. Find the angles of the parallelogram

17. Is 53240 a perfect cube? If not, then by which smallest natural number should 53240 be divided so that the quotient is a perfect cube?
18. Find the square root of 3136 by division method.

V. ANSWER THE FOLLOWING QUESTIONS.

$2 \times 4 = 8$

19. Solve the following linear equations:

i) $\frac{6x+1}{3} + 1 = \frac{x-3}{6}$ ii) $m - \frac{m-1}{2} = 1 - \frac{m-2}{3}$

OR

Simplify and solve the following linear equations:

i) $15(y - 4) - 2(y - 9) = 5(y + 6)$ ii) $3(5z - 7) - 2(9z - 11) = 4(8z - 13) - 17$

20. When a die is thrown, list the outcomes of an event of getting

- i) a prime number
- ii) not a prime number
- iii) a number greater than 5
- iv) a number not greater than 5