

MATH Class Test -1

F.M: 11

Chapter: Rational Numbers

DATE: 18/04/2024

1. Choose the correct option:

1 x 5 = 5

- i) 'Closure property' in rational numbers is **NOT** satisfied with respect to the operation _____.

(a) division (b) multiplication (c) subtraction (d) addition

- ii) Which property of the rational numbers illustrated by the following statement:

$$\left(\frac{-3}{5}\right) \times \frac{2}{7} - \left(\frac{-5}{3}\right) \times \frac{2}{7} = \left\{\left(\frac{-3}{5}\right) - \left(\frac{-5}{3}\right)\right\} \times \frac{2}{7}$$

(a) Closure (b) Commutative (c) Associative (d) Distributive

- iii) By what number should $\frac{-15}{729}$ be multiplied to get $\frac{5}{81}$?

(a) 3 (b) -3 (c) $-\frac{1}{3}$ (d) $\frac{1}{3}$

- iv) The additive identity and multiplicative identity for rational numbers are respectively –

(a) 0 , 1 (b) 1, -1 (c) 1, 0 (d) -1, 1

- v) The rational number that **does not** have a reciprocal is –

(a) 1 (b) 0 (c) -1 (d) None

2. Answer the following questions :

3 x 2 = 6

- i) Simplify : $\left(\frac{-7}{15} \times \frac{45}{28}\right) - \left(\frac{3}{16} \div \frac{-9}{4}\right) + \left(\frac{121}{7} \times \frac{28}{99}\right)$

- ii) Find five rational numbers between $\frac{3}{4}$ and $\frac{4}{5}$. How many rational numbers are there between $\frac{3}{4}$ and $\frac{4}{5}$?

PRACTICE QUESTION

(Not given in class test)

Q. If a train travels $2210\frac{1}{4}$ kilometres in $17\frac{1}{2}$ hours, then answer the following questions:

- (i) Find the speed of the train.
- (ii) Find the distance covered by the train in 45 minutes.
- (iii) Find the time taken by the train to cover 13 km.
- (iv) Is $2210\frac{1}{4}$ a rational number? If we replace '4' in the denominator by '0' then tell that the resultant number will be a rational number or not.

