CBSE 8th Class Mathematics

Chapter Rational Number

CBSE TEST PAPER - 05

1. A rational number p/q is said to be in the simplest form if the HCF of p and q is

(a) 2   (b) 1

(c) 0   (d) 3

2. A rational number a/b is greater than c/d if

(a) ad > bc   (b) ad < bc

(c) ad = bc   (d) ad ≠ bc

3. Rational numbers are not closed under

(a) Addition   (b) Multiplication

(c) Division   (d) Subtraction

4. Which expression shows the multiplicative identity of rational numbers?

a) a × 0 = 0 × a = 0, where a is a rational number.

b) a × 1 = 1 × a = a, where a is a rational number.

c) a × b = b × a, where a and b are rational numbers.

d) a × (b × c) =(a × b) × c, where a, b, and c are rational numbers

5.if A is a non - zero rational number , then which expression shows the existence of its multiplicative inverse?

(a) m x (1/m) = 1   (b) m/m= 1

(c) m/1 = a   (d) m x 1 = m

(e) all of these

6. Find ten rational numbers between 2 and 3.

7. Find two rational numbers between √2 and √3.

8. A library has books on fiction, non-friction, and reference books. 5/9 of all the books in the library are works of fiction and 2/15are of non-friction. If there are 7,294 reference books, how many books are there in the library?

9. Identify the Properties Associated with the following:-

(i) $\dfrac{-5}{9} \times \dfrac{3}{5} = \dfrac{3}{5} \times \left(\dfrac{-5}{9}\right)$ (ii) $\dfrac{1}{2} \times \left(\dfrac{2}{3} \times \dfrac{3}{4}\right) = \left(\dfrac{1}{2} \times \dfrac{2}{3}\right) \times \dfrac{3}{4}$

(iii) $\dfrac{1}{2} \times \left(\dfrac{2}{3} + \dfrac{3}{4}\right) = \dfrac{1}{2} \times \dfrac{2}{3} + \dfrac{1}{2} \times \dfrac{3}{4}$

10. Represent the following rational numbers on the number line.

(i) -3/7   (ii) 8/7   (iii) 1.062   (iv) $0.\overline{3}$