MATHEMATICS IN EVERYDAY LIFE–8

CORDOVA™

Chapter 1 : Rational Numbers

ASSESSMENT

Max.Marks : 20

A : Choose the correct alternatives in each of the following : **(1 × 5 = 5)**

1. A rational number between $\dfrac{-1}{2}$ and $\dfrac{1}{2}$ is

   (a) 1   (b) 0   (c) –1   (d) 2

2. 1 is called
   (a) identity element for multiplication of rational numbers
   (b) identity element for addition of rational numbers
   (c) identity element for subtraction of rational numbers
   (d) none of these

3. If $a + 0 = 0 + a = a$, where a is a rational number, then 0 is called
   (a) additive inverse of a (b) reciprocal of a
   (c) identity element for addition of rational number   (d) none of these

4. $\dfrac{1}{5}$ lies to the left of .... on the number line.

   (a) 0   (b) 1   (c) – 1   (d) none of these

5. $\dfrac{-7}{4} \times \dfrac{1}{2} + \dfrac{-7}{4} \times \dfrac{1}{2}$ is equal to

   (a) $\dfrac{-7}{8}$ (b) $\dfrac{7}{8}$ (c) $\dfrac{-7}{4}$ (d) $\dfrac{7}{4}$

B : Solve the following :

1. Verify : $\left(\dfrac{-2}{11}\right) \times \left(\dfrac{-1}{4}\right) - \left(\dfrac{-1}{4}\right) \times \left(\dfrac{-1}{3}\right) = \left(\dfrac{-2}{11}\right) \times \left[\dfrac{-1}{4} - \left(\dfrac{-1}{3}\right)\right]$ **(3 × 5 = 15)**

2. The product of two rational numbers is $\left(\dfrac{-28}{27}\right)$. If one of the numbers is $\dfrac{4}{-9}$, find the other number.

3. Find the value of x :

   (i) $x \div \left(\dfrac{-15}{108}\right) = \dfrac{-2}{3}$ (ii) $\dfrac{1}{-13} \div x = \dfrac{-4}{11}$

4. A wire of length $60\dfrac{1}{2}$ m has been cut into 5 pieces of equal length. Find the length of each piece.

5. Find five rational numbers between x and $|x|$, when $x = \dfrac{-3}{4}$.