

# Number Systems Class 9 Practice Set 1

## Representation of Rational Numbers on Real Line

**Q.1: Represent each of the following numbers on the number line:**

(i)  $\frac{3}{4}$    (ii)  $\frac{5}{7}$    (iii)  $\frac{8}{3}$    (iv)  $\frac{-23}{5}$    (v) 1.3   (vi) - 2.4   (vii)  $-\frac{5}{3}$

## Finding Rational Numbers between two given Rational Numbers

**Q.2: Find a rational number between -2 and 6.**

**Q.3: Find a rational number between  $\frac{-2}{3}$  and  $\frac{1}{4}$ .**

**Q.4: Find three rational numbers between -2 and 5.**

**Q.5: Insert 10 rational numbers between  $\frac{-3}{11}$  and  $\frac{8}{11}$ .**

**Q.6: Find three rational numbers lying between  $\frac{3}{5}$  and  $\frac{7}{8}$ .**

**Q.7: Find four rational numbers between  $\frac{3}{7}$  and  $\frac{5}{7}$ .**

**Q.8: Find six rational numbers between 2 and 3.**

**Q.9: Find five rational numbers  $\frac{3}{5}$  and  $\frac{2}{3}$ .**

**Q.10: Insert 15 rational numbers between 3.2 and 3.3.**

**Q.11: Find nine rational numbers between 0 and 0.1.**

**Q.12: State whether the following statements are true or false. Give reasons for your answer.**

- (i) Every natural number is a whole number.
- (ii) Every whole number is a natural number.
- (iii) Every integer is a whole number.
- (iv) Every integer is a rational number.
- (v) Every rational number is an integer.
- (vi) Every rational number is a whole number.
- (vii) Rational and irrational numbers combine to form real numbers.
- (viii) Every rational number is a real number.
- (ix) Every irrational number is a real number.
- (x) Every real number is an irrational number.
- (xi) Every real number is a rational number.
- (xii) Every real number is an integer.
- (xiii) Every real number is a natural number.
- (xiii) Every real number is a whole number.
- (xiv) Every natural number is a real number.
- (xv) Every integer is an irrational number.
- (xvi) Every integer is a real number.