

**RD SHARMA**

**Solutions**

**Class 7 Maths**

**Chapter 5**

**Ex 5.5**

**Q1. Find six rational numbers between  $\frac{-4}{8}$  and  $\frac{3}{8}$**

We know that

$$-4 < -3 < -2 < -1 < 0 < 1 < 2 < 3$$

$$\text{Therefore } \frac{-4}{8} < \frac{-3}{8} < \frac{-2}{8} < \frac{-1}{8} < \frac{0}{8} < \frac{1}{8} < \frac{2}{8} < \frac{3}{8}$$

Hence 6 rational numbers between  $\frac{-4}{8}$  and  $\frac{3}{8}$  are  $\frac{-3}{8}, \frac{-2}{8}, \frac{-1}{8}, \frac{0}{8}, \frac{1}{8}, \frac{2}{8}$

**Q2. Find 10 rational numbers between  $\frac{7}{13}$  and  $\frac{-4}{13}$**

We know that

$$7 > 6 > 5 > 4 > 3 > 2 > 1 > 0 > -1 > -2 > -3 > -4$$

$$\text{Therefore } \frac{7}{13} > \frac{6}{13} > \frac{5}{13} > \frac{4}{13} > \frac{3}{13} > \frac{2}{13} > \frac{1}{13} > \frac{0}{13} > \frac{-1}{13} > \frac{-2}{13} > \frac{-3}{13} > \frac{-4}{13}$$

Hence the 10 rational numbers between  $\frac{7}{13}$  and  $\frac{-4}{13}$  are

$$\frac{-3}{13}, \frac{-2}{13}, \frac{-1}{13}, \frac{0}{13}, \frac{1}{13}, \frac{2}{13}, \frac{3}{13}, \frac{4}{13}, \frac{5}{13}, \frac{6}{13}, \frac{7}{13}$$

**Q3. State true or false:**

**(i) Between any two distinct integers there is always an integer.**

FALSE

**(ii) Between any two distinct rational numbers there is always a rational number.**

TRUE

**(iii) Between any two distinct rational numbers there are infinitely many rational numbers.**

TRUE