

RATIONAL NUMBERS**ORDER OF RATIONAL NUMBER****EXERCISE**

Q.1 Which of the two rational numbers in each of the following pairs of rational numbers is smaller?

(i) $\frac{-4}{3}$ or $\frac{-8}{7}$

(vi) $\frac{(-4)}{3}$ or $\frac{8}{(-7)}$

(ii) $\frac{(-6)}{(-13)}$ or $\frac{7}{13}$

(vii) $\frac{9}{(-13)}$ or $\frac{7}{(-12)}$

(iii) $\frac{7}{-9}$ or $\frac{-5}{8}$

(viii) $\frac{(-12)}{5}$ or -3

(iv) $\frac{16}{(-5)}$ or 3

(ix) $\frac{4}{-5}$ or $\frac{-7}{10}$

(v) $\frac{-1}{3}$ or $\frac{4}{-5}$

(x) $\frac{-12}{5}$ or -3

Q.2 Arrange the following rational number ascending order:

(i) $\frac{2}{3}, \frac{5}{7}, \frac{(-4)}{(-9)}, \frac{1}{4}$

(ii) $\frac{4}{(-9)}, \frac{(-5)}{12}, \frac{7}{(-18)}, \frac{(-2)}{3}$

$$(iii) \quad \frac{3}{5}, \frac{(-17)}{(-30)}, \frac{8}{(-15)}, \frac{(-7)}{10}$$

$$(iv) \quad \frac{(-3)}{4}, \frac{5}{(-12)}, \frac{(-7)}{16}, \frac{9}{(-24)}$$

$$(v) \quad \frac{(-4)}{9}, \frac{5}{(-12)}, \frac{7}{(-18)}, \frac{2}{(-3)}$$

$$(vi) \quad \frac{3}{(-5)}, \frac{(-7)}{10}, \frac{(-11)}{15}, \frac{(-13)}{20}$$

$$(vii) \quad \frac{2}{3}, \frac{(-4)}{7}, \frac{(-8)}{3}, \frac{6}{(-9)}$$

$$(viii) \quad \frac{(-4)}{7}, \frac{(-9)}{14}, \frac{13}{(-28)}, \frac{(-23)}{42}$$

Q.3 Arrange the following rational number descending order:

$$(i) \quad -2, \frac{(-13)}{6}, \frac{8}{(-3)}, \frac{1}{3}$$

$$(ii) \quad \frac{(-3)}{(-5)}, \frac{17}{30}, \frac{(-8)}{15}, \frac{7}{(-10)}$$

$$(iii) \quad \frac{(-3)}{10}, \frac{7}{(-15)}, \frac{(-11)}{20}, \frac{17}{(-30)}$$

$$(iv) \quad \frac{7}{8}, \frac{64}{16}, \frac{36}{(-12)}, \frac{5}{(-4)}, \frac{140}{28}$$

$$(v) \quad \frac{(-5)}{6}, \frac{(-7)}{12}, \frac{(-13)}{18}, \frac{23}{(-24)}$$

$$(vi) \quad \frac{(-3)}{10}, \frac{17}{(-30)}, \frac{7}{(-15)}, \frac{(-11)}{20}$$

$$(vii) \quad \frac{(-10)}{11}, \frac{(-19)}{22}, \frac{(-23)}{33}, \frac{(-39)}{44}$$

$$(viii) \quad \frac{2}{5}, \frac{(-3)}{(-4)}, \frac{1}{2}, \frac{(-7)}{(-6)}, 0$$

ANSWER KEY

$$1. \quad (i) \quad \frac{-4}{3} \qquad (ii) \quad \frac{(-6)}{(-13)}$$

$$(iii) \quad \frac{7}{-9} \qquad (iv) \quad \frac{16}{-5}$$

$$(v) \quad \frac{4}{-5} \qquad (vi) \quad \frac{(-4)}{3}$$

$$(vii) \quad \frac{9}{-13} \qquad (viii) \quad -3$$

$$(ix) \quad \frac{4}{-5} \qquad (x) \quad -3$$

$$2. \quad (i) \quad \frac{1}{4} < \frac{(-4)}{9} < \frac{2}{3} < \frac{5}{7}$$

$$(ii) \quad \frac{(-2)}{3} < \frac{4}{(-9)} < \frac{(-5)}{12} < \frac{7}{(-18)}$$

$$(iii) \quad \frac{(-7)}{10} < \frac{8}{(-15)} < \frac{(-17)}{(-30)} < \frac{3}{5}$$

$$(iv) \quad \frac{(-3)}{4} < \frac{(-7)}{16} < \frac{5}{(-12)} < \frac{9}{(-24)}$$

$$(v) \quad \frac{2}{(-3)} < \frac{(-4)}{9} < \frac{5}{(-12)}, \frac{7}{(-18)}$$

$$(vi) \quad \frac{(-11)}{15} < \frac{(-7)}{10} < \frac{(-13)}{20} < \frac{3}{(-5)}$$

$$(vii) \quad \frac{(-8)}{3} < \frac{6}{(-9)} < \frac{(-4)}{7} < \frac{2}{3}$$

$$(viii) \quad \frac{(-9)}{14} < \frac{(-4)}{7} < \frac{(-23)}{42} < \frac{13}{(-28)}$$

$$3. \quad (i) \quad \frac{1}{3} > -2 > \frac{(-13)}{6} > \frac{8}{(-3)}$$

$$(ii) \quad \frac{(-3)}{(-5)} > \frac{17}{30} > \frac{(-8)}{15} > \frac{7}{(-10)}$$

$$(iii) \quad \frac{(-3)}{10} > \frac{7}{(-15)} > \frac{(-11)}{20} > \frac{17}{(-30)}$$

$$(iv) \quad \frac{140}{28} > \frac{64}{16} > \frac{7}{8} > \frac{5}{(-4)} > \frac{36}{(-12)}$$

$$(v) \quad \frac{(-7)}{12} > \frac{(-13)}{18} > \frac{(-5)}{6} > \frac{23}{(-24)}$$

$$(vi) \quad \frac{(-3)}{10} > \frac{7}{-15} > \frac{-11}{20} > \frac{17}{-30}$$

$$(vii) \quad \frac{-23}{33} > \frac{-19}{22} > \frac{-39}{44} > \frac{-10}{11}$$

$$(viii) \quad \frac{-7}{-6} > \frac{-3}{-4} > \frac{1}{2} > \frac{2}{5} > 0$$