

## Fractions Ex 6.7 Q7

Answer:

(i) 
$$\frac{2}{9}$$
,  $\frac{7}{9}$ ,  $\frac{3}{9}$ ,  $\frac{4}{9}$ ,  $\frac{1}{9}$ ,  $\frac{6}{9}$ ,  $\frac{5}{9}$ 

When denominators are the same & numerators are different, then the fraction with greater numerator has a larger value.

(ii) 
$$\frac{7}{8}$$
,  $\frac{7}{25}$ ,  $\frac{7}{11}$ ,  $\frac{7}{18}$ ,  $\frac{7}{10}$ 

When numerators are the same & denominators are different, then the fraction with smaller denominator has a smaller value.

$$\frac{7}{25} < \frac{7}{18} < \frac{7}{11} < \frac{7}{10} < \frac{7}{8}$$

(iii) 
$$\frac{37}{47}$$
,  $\frac{37}{50}$ ,  $\frac{37}{100}$ ,  $\frac{37}{1000}$ ,  $\frac{37}{85}$ ,  $\frac{37}{41}$ 

When numerators are the same & denominators are different, then the fraction with greater denominator has a smaller value.

$$\frac{37}{1000} < \frac{37}{100} < \frac{37}{85} < \frac{37}{50} < \frac{37}{47} < \frac{37}{41}$$

(iv) 
$$\frac{3}{5}$$
,  $\frac{1}{5}$ ,  $\frac{4}{5}$ ,  $\frac{2}{5}$ 

When denominators are the same & numerators are different, then the fraction with greater numerator has a larger value.

$$\frac{1}{5} < \frac{2}{5} < \frac{3}{5} < \frac{4}{5}$$

LCM of 2, 4 and 5 is 20.

$$\frac{2}{5} = \frac{2}{5} \times \frac{4}{4} = \frac{8}{20}$$

$$\frac{3}{4} = \frac{3}{4} \times \frac{5}{5} = \frac{15}{20}$$

$$\frac{1}{2} = \frac{1}{2} \times \frac{10}{10} = \frac{10}{20}$$

$$\frac{3}{5} = \frac{3}{5} \times \frac{4}{4} = \frac{12}{20}$$

$$\begin{array}{l} \frac{2}{5} < \frac{1}{2} < \frac{3}{5} < \frac{3}{4} \\ \text{(VI)} \\ \frac{3}{8}, \frac{3}{12}, \frac{3}{6}, \frac{3}{4} \end{array}$$

When numerators are the same & denominators are different, then the fraction with smaller denominator has a greater value.

$$\frac{3}{12} < \frac{3}{8} < \frac{3}{6} < \frac{3}{4}$$

$$\frac{4 \div 2}{6 \div 2} = \frac{2}{3}$$
 (Dividing the numerator & denominator by the HCF of 4 & 6)

$$\frac{6}{12} = \frac{1}{2}$$
 (Dividing the numerator & denominator by the HCF of 6 & 12)

LCM of 2, 8, 3 and 16 is 48.

$$\frac{4}{6} = \frac{2}{3} \times \frac{16}{16} = \frac{32}{48}$$

$$\frac{6}{12} = \frac{1}{2} \times \frac{24}{24} = \frac{24}{48}$$

$$\frac{3}{8} = \frac{3}{8} \times \frac{6}{6} = \frac{18}{48}$$

$$\frac{5}{16} = \frac{5}{16} \times \frac{3}{3} = \frac{15}{48}$$

When denominators are the same & numerators are different, then the fraction with greater numerator has a greater value.

$$\frac{5}{16} < \frac{3}{8} < \frac{6}{12} < \frac{4}{6}$$