

Compare and Order – Solutions

1. $\frac{3}{5} = \frac{?}{20}$
 $\times 4$

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

2. $\frac{21}{36} = \frac{?}{12}$
 $\div 3$

$$\frac{21 \div 3}{36 \div 3} = \frac{7}{12}$$

3. $\frac{1}{2}$ and $\frac{4}{5}$

LCM $\rightarrow 2 \cdot 5 = 10$

Equivalent fractions: $\frac{1}{2} = \frac{?}{10}$ $\frac{4}{5} = \frac{?}{10}$
 $\times 5$ $\times 2$

$$\frac{5}{10} \text{ and } \frac{8}{10}$$

4. $\frac{5}{7}$ and $\frac{2}{1}$

LCM: $\rightarrow 7 \cdot 1 = 7$

Equivalent fractions: $\frac{5}{7} = \frac{?}{7}$ $\frac{2}{1} = \frac{?}{7}$
 $\times 1$ $\times 7$

$$\frac{5}{7} \text{ and } \frac{14}{7}$$

5. $\frac{3}{8} \text{ ? } \frac{5}{8}$

LCD is 8 so compare numerators: $3 < 5$

$$\frac{3}{8} < \frac{5}{8}$$

6. $\frac{5}{7} \text{ ? } \frac{2}{3}$

Step 1: LCM $7 \cdot 3 = 21$

Step 2: equivalent fractions $\frac{5}{7} = \frac{?}{21}$, $\frac{2}{3} = \frac{?}{21}$
 $\times 3$ $\times 7$

Step 3: new numerators $\frac{15}{21}$, $\frac{14}{21}$

Step 4: compare numerators $15 > 14$

$$\boxed{\frac{5}{7} > \frac{2}{3}}$$

7. $\frac{48}{4} \text{ ? } 12$

$$\begin{array}{ccc} \frac{48}{4} & \boxed{?} & 12 \\ \downarrow & & \downarrow \\ 12 & \boxed{?} & 12 \end{array}$$

$12 = 12$

$$\boxed{\frac{48}{4} = 12}$$

8. $\frac{18}{5} \text{ ? } \frac{33}{8}$

$$\begin{array}{r} 3 \\ 5 \overline{) 18} \\ \underline{-15} \\ 3 \end{array}$$

$$3 \frac{3}{5}$$

$$\begin{array}{r} 4 \\ 8 \overline{) 33} \\ \underline{-32} \\ 1 \end{array}$$

$$4 \frac{1}{8}$$

③ $\frac{3}{5}$? ④ $\frac{1}{8}$

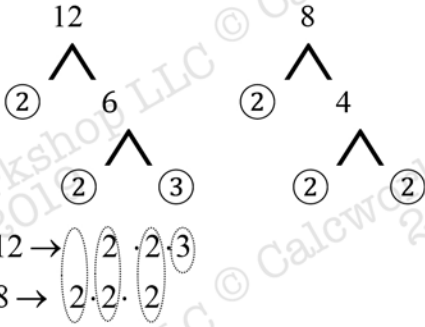
$3 < 4$

$$\boxed{\frac{18}{5} < \frac{33}{8}}$$

9. $2\frac{7}{12}$? $2\frac{5}{8}$

$\frac{7}{12}$? $\frac{5}{8}$

Step 1: LCM



LCM = $2 \cdot 2 \cdot 2 \cdot 3 = 24$

Step 2: equivalent fractions $\frac{7}{12} = \frac{?}{24}$, $\frac{5}{8} = \frac{?}{24}$

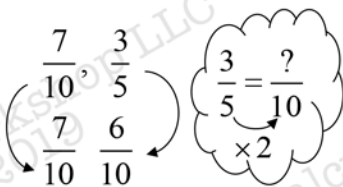
$\frac{7}{12} \xrightarrow{\times 2} \frac{?}{24}$ $\frac{5}{8} \xrightarrow{\times 2} \frac{?}{24}$

Step 3: new numerators $\frac{14}{24}$, $\frac{15}{24}$

Step 4: compare numerators $14 < 15$

$2\frac{7}{12} < 2\frac{5}{8}$

10. $\frac{7}{10}$, $1\frac{2}{5}$, $\frac{3}{5}$
Largest



$\frac{3}{5}, \frac{7}{10}, 1\frac{2}{5}$