

Compare and Order Fractions and Mixed Numbers

The three fractions $\frac{2}{3}$, $\frac{3}{4}$ and $\frac{2}{6}$ are arguing about who is the largest.

You can settle the argument by finding a common multiple of the denominators.

STEP 1

Find the product of all three denominators. Use it for the denominator.

$$3 \times 4 \times 6 = 72$$

72 is the common multiple.

STEP 2

Rename each fraction so that 72 is the denominator.

$$\frac{2}{3} = \frac{2 \cdot 24}{3 \cdot 24} = \frac{48}{72} \quad \frac{3}{4} = \frac{3 \cdot 18}{4 \cdot 18} = \frac{54}{72} \quad \frac{2}{6} = \frac{2 \cdot 12}{6 \cdot 12} = \frac{24}{72}$$

STEP 3

Compare the numerator. Put them in order from least to greatest.

$$\begin{array}{ccc} \frac{24}{72} & \frac{48}{72} & \frac{54}{72} \\ \downarrow & \downarrow & \downarrow \\ \frac{2}{6} & \frac{2}{3} & \frac{3}{4} \end{array}$$

Examples:

A- Compare. Write $<$, $>$ or $=$

$$1) \frac{2}{5} \leq \frac{3}{5}$$

$$2) \frac{1}{6} \geq \frac{1}{8}$$

$$3) \frac{9}{8} = \frac{2}{2}$$

$$4) \frac{7}{18} \geq \frac{5}{4}$$

B- Write in order from least to greatest.

$$\frac{1}{4}, \frac{7}{4}, \frac{4}{7}, \frac{1}{7}$$

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$$\frac{1}{7}, \frac{1}{4}, \frac{4}{7}, \frac{7}{4}$$