

Compare and Order Fractions

It has never been easier to compare and order fractions. Here is a technique that will save you huge efforts.

When comparing two fractions to see which one is larger, simply cross multiply. Multiply the numerator of one fraction with the denominator of the other, then compare the resulting whole numbers.

$$\frac{2}{5} \quad \frac{3}{8}$$

$$2 \times 8 = 16 \quad \frac{2}{5} \quad \frac{3}{8} \quad 3 \times 5 = 15$$

$$16 > 15 \text{ so } \left(\frac{2}{5} > \frac{3}{8} \right)$$

$$\frac{7}{8} \quad \frac{4}{5}$$

$$\frac{6}{9} \quad \frac{2}{3}$$

$$\frac{4}{9} \quad \frac{3}{7}$$

$$\frac{4}{11} \quad \frac{2}{6}$$

$$\frac{9}{12} \quad \frac{2}{3}$$

$$\frac{1}{3} \quad \frac{3}{8}$$

$$\frac{5}{12} \quad \frac{3}{8}$$

$$\frac{2}{3} \quad \frac{7}{8}$$

$$\frac{4}{5} \quad \frac{8}{10}$$

When ordering fractions, you can use the same technique but you'll have to use it more than once.

First, compare the first two fractions to see which is larger, then compare the second two fractions.

$$\frac{2}{5} \quad \frac{3}{8} \quad \frac{7}{12}$$

$$2 \times 8 = 16 \quad \frac{2}{5} \quad \frac{3}{8} \quad 3 \times 5 = 15 \quad \frac{2}{5} > \frac{3}{8}$$

now compare $\frac{3}{8}$ to $\frac{7}{12}$

$$\frac{36}{8} < \frac{56}{12}$$

okay, so $\frac{7}{12}$ is also larger than $\frac{3}{8}$. That makes $\frac{3}{8}$ the smallest.
Now we have to check $\frac{2}{5}$ against $\frac{7}{12}$

$$\frac{24}{5} < \frac{35}{12} \quad \text{So, } \frac{7}{12} \text{ is largest!}$$

$$\frac{7}{12} > \frac{2}{5} > \frac{3}{8}$$

Compare and order these two sets of fractions.

$$\frac{3}{7} \quad \frac{2}{5} \quad \frac{5}{8}$$

$$\frac{4}{7} \quad \frac{9}{10} \quad \frac{8}{11}$$