

Comparing Fractions

Remember: **numerator** $\frac{2}{5}$ 2 = numerator
 denominator 5 5 = denominator

When comparing fractions, if the **denominator** is the **different** for the fractions we must first find a **common denominator**. We do this by looking at the **multiples** of each **denominator**.

Example: $\frac{2}{5}$ $\frac{1}{7}$ Try setting the two fractions out underneath one another and find the **common multiple**

Step 1 $\frac{2}{5}$ multiples = 5, 10, 15, 20, 25, 30, 35, 40, 45, 50
 $\frac{1}{7}$ multiples = 7, 14, 21, 28, 35, 42, 49, 56, 63, 70

Since 35 is the **common multiple**, both denominators must be converted into 35ths! What **factor** must the **denominator** be multiplied by to make 35?
Multiply the **numerator** by the same **factor**

$$\text{Step 2} \quad \frac{2}{5} \quad \times \quad 7 \quad = \quad \frac{14}{35}$$

$$\frac{1}{7} \quad \times \quad 5 \quad = \quad \frac{5}{35}$$

Now that the **denominators** are the same, we can compare the fractions in the usual way. But remember to use the correct symbol, >, <, =

$$\text{Step 3} \quad \frac{14}{35} \quad > \quad \frac{5}{35}$$

So $\frac{2}{5}$ is greater than $\frac{1}{7}$

Now try these using the same three steps:

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

2. $\frac{3}{5}$ $\frac{5}{6}$

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

4. $\frac{5}{9}$ $\frac{3}{7}$

5. $\frac{7}{10}$ $\frac{4}{5}$

6. $\frac{7}{12}$ $\frac{4}{7}$

7. $\frac{5}{11}$ $\frac{3}{5}$

8. $\frac{9}{20}$ $\frac{3}{5}$

9. $\frac{3}{8}$ $\frac{2}{9}$

ANSWERS

1. $\frac{3}{4} > \frac{1}{2}$

2. $\frac{3}{5} < \frac{5}{6}$

3. $\frac{5}{8} < \frac{2}{3}$

4. $\frac{5}{9} > \frac{3}{7}$

5. $\frac{7}{10} < \frac{4}{5}$

6. $\frac{7}{12} > \frac{4}{7}$

7. $\frac{5}{11} < \frac{3}{5}$

8. $\frac{9}{20} < \frac{3}{5}$

9. $\frac{3}{8} > \frac{2}{9}$