

# 4.7 Comparing and Ordering Fractions

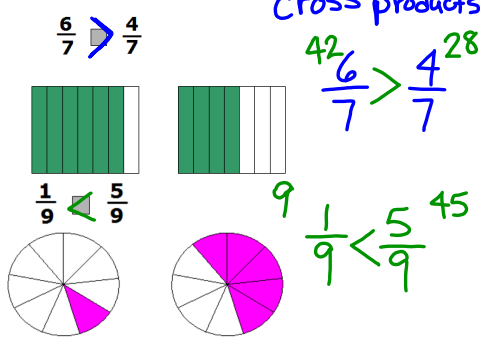
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Nov 10-8:50 AM

When you are comparing fractions, first check their denominators. When fractions have the same denominator, they are called **like fractions**. For example,  $\frac{6}{7}$  and  $\frac{4}{7}$  are like fractions. When two fractions have different denominators, they are called **unlike fractions**. For example,  $\frac{7}{10}$  and  $\frac{1}{2}$  are unlike fractions.

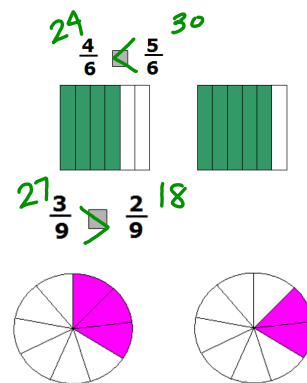
Nov 10-8:53 AM

Compare. Write <, >, or =.



Nov 10-8:53 AM

Compare. Write <, >, or =.



Nov 10-8:54 AM

To compare unlike fractions, first rename the fractions so they have the same denominator. This is called finding a **common denominator**.

Nov 10-8:54 AM

Ray has  $\frac{2}{3}$  cup of nuts. He needs  $\frac{3}{4}$  cup to make cookies. Does he have enough nuts for the recipe?

Find equivalent fractions with 12 as the denominator.

$$\frac{2}{3} \cdot \frac{4}{4} = \frac{8}{12} \qquad \frac{3}{4} \cdot \frac{3}{3} = \frac{9}{12}$$

$$\frac{8}{12} < \frac{9}{12}$$

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

Nov 10-8:54 AM

Trevor has  $\frac{1}{3}$  cup of soil. He needs  $\frac{1}{4}$  cup to fill a small planter. Does he have enough soil to fill the planter?

Find equivalent fractions with 12 as the denominator.

$$\frac{1}{3} \cdot \frac{4}{4} = \frac{4}{12} \qquad \frac{1}{4} \cdot \frac{3}{3} = \frac{3}{12}$$

Nov 10-8:55 AM

Order  $\frac{4}{5}$ ,  $\frac{2}{3}$ , and  $\frac{1}{3}$  from least to greatest.

- Find a common denominator.
- Change each fraction to an equivalent with the common denominator.
- Compare the numerators.

$$\frac{4}{5} = \frac{12}{15} \qquad \frac{2}{3} = \frac{10}{15} \qquad \frac{1}{3} = \frac{5}{15}$$

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

Dec 2-8:40 AM

Order  $\frac{4}{7}$ ,  $\frac{3}{4}$ , and  $\frac{1}{4}$  from least to greatest.

- Find a common denominator.
- Change each fraction to an equivalent with the common denominator.
- Compare the numerators.

$$\frac{4}{7} = \frac{16}{28} \qquad \frac{3}{4} = \frac{21}{28} \qquad \frac{1}{4} = \frac{7}{28}$$

$$\frac{1}{4}, \frac{3}{7}, \frac{4}{4}$$

Dec 2-8:40 AM

Compare. Write <, >, or =.

- $\frac{23}{6} = \frac{24}{6}$
- $\frac{80}{6} > \frac{72}{6}$
- You drilled three holes in a piece of wood. The diameters of the holes are  $\frac{1}{8}$ ,  $\frac{3}{8}$ , and  $\frac{3}{16}$  inches. Which hole is the largest?

Order the fractions from least to greatest.

- $\frac{7}{8}, \frac{5}{8}, \frac{2}{3}$
- $\frac{3}{4}, \frac{5}{8}, \frac{5}{6}$

$$\frac{4}{8} > \frac{3}{8} \qquad \frac{3}{4} < \frac{5}{6}$$

$$\frac{30}{80} < \frac{50}{80}$$

$$\frac{5}{8}, \frac{3}{4}, \frac{5}{6}$$

Dec 2-8:46 AM

Cross products

$$\frac{6}{7} \square \frac{4}{7} \qquad \frac{3}{9} \square \frac{2}{9}$$

$$\frac{4}{6} \square \frac{5}{6}$$

Jan 17-9:31 AM

Cross products

Order the fractions from least to greatest.

$$\frac{3}{4}, \frac{5}{8}, \frac{5}{6} \qquad \frac{7}{8}, \frac{5}{8}, \frac{2}{3}$$

$$\frac{18}{24}, \frac{15}{24}, \frac{20}{24}$$

$$\frac{5}{8}, \frac{7}{8}, \frac{5}{8} < \frac{2}{3}$$

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

Jan 17-9:35 AM

Cross products

$$\frac{3}{6} \quad \square \quad \frac{4}{8}$$

$$\frac{5}{8} \quad \square \quad \frac{9}{16}$$

Jan 17-9:35 AM

Cross products

**Order the fractions from least to greatest.**

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

Jan 17-9:35 AM