NAME _____ DATE _____ PERIOD _____

Lesson 5 Reteach

Compare and Order Fractions, Decimals, and Percents

To compare two fractions.

- Find the *least common denominator (LCD)* of the fractions; that is, find the least common multiple of the denominators.
- Write an equivalent fraction for each fraction using the LCD.
- Compare the numerators.

Example 1

Replace ● with <, >, or = to make $\frac{1}{3}$ ● $\frac{5}{12}$ true.

The LCM of 3 and 12 is 12. So, the LCD is 12.

Rewrite each fraction with a denominator of 12.

$\frac{1}{3} = \frac{\square}{12}$, so $\frac{1}{3} = \frac{4}{12}$. ($\times 4$)

$\frac{5}{12} = \frac{5}{12}$

Now compare. Since $4 < 5, \frac{4}{12} < \frac{5}{12}$. So, $\frac{1}{3} < \frac{5}{12}$.

Example 2

Order $\frac{1}{6}, \frac{2}{3}, \frac{1}{4}$, and $\frac{3}{8}$ from least to greatest.

The LCD of the fractions is 24. So, rewrite each fraction with a denominator of 24.

$\frac{1}{6} = \frac{\square}{24}$, so $\frac{1}{6} = \frac{4}{24}$. ($\times 4$)

$\frac{2}{3} = \frac{\square}{24}$, so $\frac{2}{3} = \frac{16}{24}$. ($\times 8$)

$\frac{1}{4} = \frac{\square}{24}$, so $\frac{1}{4} = \frac{6}{24}$. ($\times 6$)

$\frac{3}{8} = \frac{\square}{24}$, so $\frac{3}{8} = \frac{9}{24}$. ($\times 3$)

The order of the fractions from least to greatest is $\frac{1}{6}, \frac{1}{4}, \frac{3}{8}, \frac{2}{3}$.

Example 3

Replace ● each with <, >, or = to make a true statement.

1. $\frac{5}{12}$ ● $\frac{3}{8}$

2. $\frac{6}{8}$ ● $\frac{3}{4}$

3. $3\frac{2}{7}$ ● $3\frac{1}{6}$

Order the fractions from least to greatest.

4. $\frac{3}{4}, \frac{3}{8}, \frac{1}{2}, \frac{1}{4}$

5. $\frac{2}{3}, \frac{1}{6}, \frac{5}{18}, \frac{7}{9}$

6. $1\frac{1}{2}, 1\frac{5}{6}, 1\frac{5}{8}, 1\frac{5}{12}$