

Chapter 2 Lesson 5

Compare and Order Fractions, Decimals and Percent

Fractions:

Method 1: Cross Multiply

Compare two fractions:

$$\frac{6}{9} = \frac{30}{45}$$

$$\begin{array}{ccc} \textcircled{30} & & \textcircled{36} \\ \frac{6}{9} & \times & \frac{4}{5} \end{array}$$

*Bigger circled number is the bigger fraction

$$\frac{4}{5} = \frac{36}{45}$$

$$\frac{6}{9} < \frac{4}{5}$$

Several Fractions:

$$\frac{4}{5}, \frac{1}{2}, \frac{9}{10}, \frac{3}{4}$$

$$\begin{array}{ccc} * \textcircled{8} & & \textcircled{5} \\ \frac{4}{5} & \times & \frac{1}{2} \end{array}$$

$$\begin{array}{ccc} \textcircled{10} & & \textcircled{18} * \\ \frac{1}{2} & \times & \frac{9}{10} \end{array}$$

$$\begin{array}{ccc} \textcircled{4} & & \textcircled{6} * \\ \frac{1}{2} & \times & \frac{3}{4} \end{array}$$

$$\begin{array}{ccc} \textcircled{40} & & \textcircled{45} \\ \frac{4}{5} & \times & \frac{9}{10} \end{array}$$

$$\begin{array}{ccc} \textcircled{16} & & \textcircled{15} \\ \frac{4}{5} & \times & \frac{3}{4} \end{array}$$

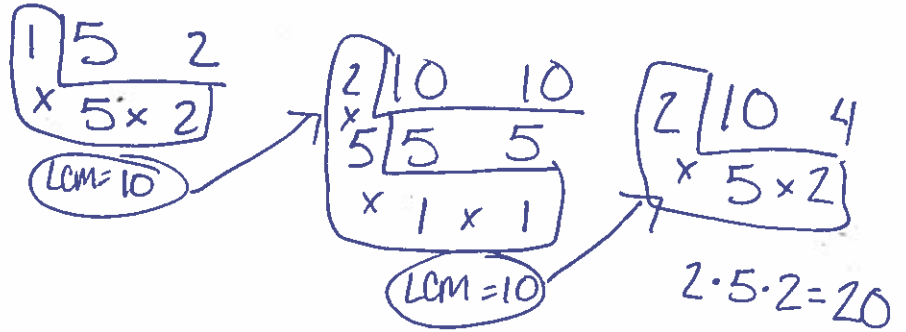
$$\frac{1}{2}, \frac{3}{4}, \frac{4}{5}, \frac{9}{10}$$

$$\frac{4}{5}, \frac{1}{2}, \frac{9}{10}, \frac{3}{4}$$

Method 2: Cake Method

$$\begin{aligned} \textcircled{1} \frac{4}{5} &= \frac{16}{20} \quad (\times 4) \\ \textcircled{2} \frac{1}{2} &= \frac{10}{20} \quad (\times 10) \\ \textcircled{3} \frac{9}{10} &= \frac{18}{20} \quad (\times 2) \\ \textcircled{4} \frac{3}{4} &= \frac{15}{20} \quad (\times 5) \end{aligned}$$

* Put ONLY DENOMINATORS into cake to solve for LCM



$$\frac{1}{2}, \frac{3}{4}, \frac{4}{5}, \frac{9}{10}$$

Compare fractions, decimals and percents

(Easier to compare decimals)

Examples:

$$\frac{3}{4} = \frac{75}{100} \quad (\times 25)$$

$$0.75 > 0.7$$

$$281.72 > 3\frac{16}{100} = 3.16$$

$$85\% < \frac{7}{8} = 0.875$$

$$\begin{array}{r} .875 \\ 8 \overline{) 7.000} \\ \underline{-64} \\ 60 \\ \underline{-56} \\ 40 \end{array}$$

$$\frac{18}{14} = 2\frac{6}{7}$$

$$1\frac{2}{14}$$

$$1\frac{1}{7} < 2\frac{6}{7}$$

$$\frac{85}{100} = 0.85$$