

Comparing fractions—  
must have a common denominator. LCM

$$\frac{2}{9} = \frac{4}{18}$$

$$\frac{1}{6} = \frac{3}{18}$$

*(Note:  $\frac{2}{9} \times 2 = \frac{4}{18}$  and  $\frac{1}{6} \times 3 = \frac{3}{18}$ )*

$$\frac{2}{9} > \frac{1}{6}$$

$$\frac{4}{18} > \frac{3}{18}$$

LCM

$$9 = 3 \cdot 3$$

$$6 = 2 \cdot 3$$

$$6 = 2 \cdot 3$$

THANOS

$$9 \cdot 2 = 18$$

$$6 \cdot 2 = 12$$

$$9 \cdot 1 = 9$$

$$\frac{12}{54} = \frac{2}{9}$$

$$\frac{9}{54} = \frac{1}{6}$$

Comparing —

Find the lowest common denominator

$$\frac{13}{20} = \frac{39}{60}$$

$$\frac{11}{15} = \frac{44}{60}$$

$$\frac{13}{20} < \frac{11}{15}$$

$$\frac{39}{60} < \frac{44}{60}$$

LCM

$$20 = 2 \cdot 2 \cdot 5$$

$$15 = 3 \cdot 5$$

$$15 = 3 \cdot 5$$

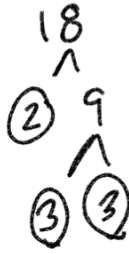
$$20 = 2 \cdot 2 \cdot 5$$

$$15 \cdot 2 \cdot 2 = 60$$

$$\frac{7}{12} < \frac{11}{18}$$

$$\frac{7}{12} = \frac{7 \cdot 3}{12 \cdot 3} = \frac{21}{36}$$

$$\frac{11}{18} = \frac{11 \cdot 2}{18 \cdot 2} = \frac{22}{36}$$



12: ~~3~~ · ~~2~~ · ~~2~~  
 18: 3 · 3 · 2

18 · 2 = 36

-105 -5 -11 -99  
 (9) < (21)

< Less than  
 > Greater than

$$\frac{7}{12} < \frac{11}{18}$$

$$\downarrow \quad \downarrow$$

$$\frac{21}{36} < \frac{22}{36}$$

2 · 4 · 2    3 · 3 · 2    1 · 3 · 4  
 (3) · 4 · 2    (4) · 3 · 2    (2) · 3 · 4

$$\frac{16}{24} \quad \frac{18}{24} \quad \frac{12}{24}$$

3    4    2

LCM

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

$$\frac{16}{24} \quad \frac{18}{24} \quad \frac{12}{24}$$

Least → Greatest

$$\frac{12}{24} \quad \frac{16}{24} \quad \frac{18}{24}$$

$$\downarrow \quad \downarrow \quad \downarrow$$

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

Put in order from least to greatest

$$\frac{2}{5} \quad \frac{1}{3} \quad \frac{3}{7} \quad \frac{4}{9}$$

$$\frac{2}{5} \cdot \frac{3}{3} \cdot \frac{7}{7} \cdot \frac{9}{9} = \frac{378}{945}$$

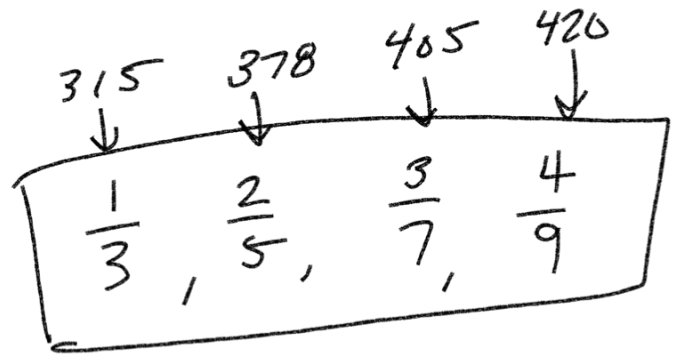
$$\frac{1}{3} \cdot \frac{5}{5} \cdot \frac{7}{7} \cdot \frac{9}{9} = \frac{315}{945}$$

$$\frac{3}{7} \cdot \frac{3}{3} \cdot \frac{5}{5} \cdot \frac{9}{9} = \frac{405}{945}$$

$$\frac{4}{9} \cdot \frac{3}{3} \cdot \frac{5}{5} \cdot \frac{7}{7} = \frac{420}{945}$$

$$\begin{array}{cccc} \frac{2}{5} & \frac{1}{3} & \frac{3}{7} & \frac{4}{9} \\ \downarrow & \downarrow & \downarrow & \downarrow \\ \frac{378}{945} & \frac{315}{945} & \frac{405}{945} & \frac{420}{945} \end{array}$$

Least to Greatest



Decimals to Fractions (in simplest terms)

$$0.\underline{\underline{75}} = \frac{75 \div 25}{100 \div 25} = \left( \frac{3}{4} \right)$$

$$0.\underline{\underline{09}} = \frac{9}{100}$$

$$0.\underline{\underline{16}} = \frac{16 \div 4}{100 \div 4} = \left( \frac{4}{25} \right)$$

$$0.389 = \frac{389}{1000}$$

$$8.8 = \frac{88 \div 2}{10 \div 2} = \frac{44}{5}$$

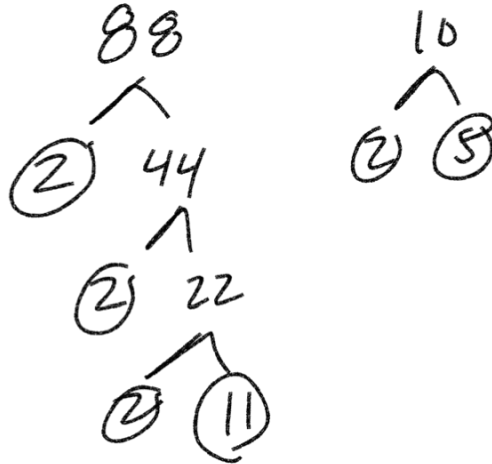
$$8.8 =$$

$$72.18$$

$$\frac{7218 \div 2}{100 \div 2} = \frac{3609}{50}$$

$$88 : 2 \cdot 2 \cdot 2 \cdot 2$$

$$10 : 2 \cdot 5$$



$$1.) 0.48 = \frac{48 \div 4}{100 \div 4} = \frac{12}{25}$$

$$2.) 0.862 = \frac{862 \div 2}{1000 \div 2} = \frac{431}{500}$$

$$3.) 0.0004 = \frac{4 \div 4}{10,000 \div 4} = \frac{1}{2,500}$$

$$4.) 25.2 = \frac{252 \div 2}{10 \div 2} = \frac{126}{5}$$

$$5.) 834.21 = \frac{83421}{100}$$

# Fraction $\rightarrow$ Decimal

$$\frac{7}{8}$$

Hi, I'm  
Math



$$\frac{37}{8} \quad 8 \overline{) 37} \quad \text{RIP}$$

$$\frac{7}{8} \rightarrow$$

$$\begin{array}{r} .875 \\ 8 \overline{) 7.000} \\ \underline{-64} \phantom{00} \downarrow \\ 60 \phantom{0} \downarrow \\ \underline{-56} \phantom{0} \downarrow \\ 40 \phantom{0} \downarrow \\ \underline{-40} \\ 0 \end{array}$$

$$\frac{7}{8} \rightarrow \frac{0.}{8} \quad 8 \overline{) 7.}$$

$$\frac{7}{8} = 0.875$$

