

Comparing Fractions

Must have a common denominator.

$$\frac{2}{9}$$

$$\frac{1}{6}$$

$$\frac{2}{9} \xrightarrow{\times 2} \frac{4}{18}$$

$$\frac{1}{6} \xrightarrow{\times 3} \frac{3}{18}$$

LCM

9	6
^	^
3 · 3	3 · 2

9 = ~~3 · 3~~
 6 = ~~3 · 2~~
 LCM: 3 · 2 · 3 = 18

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

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

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

(12) (9)

$$\frac{2 \cdot 6}{9 \cdot 6} = \frac{\boxed{12}}{54}$$

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

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

$$\frac{13}{20} \xrightarrow{\times 3} \frac{39}{60}$$

$$\frac{11}{15} \xrightarrow{\times 4} \frac{44}{60}$$

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

20	15
^	^
2 · 10	5 · 3
^	
2 · 5	

~~20 = 2 · 2 · 5~~
~~15 = 3 · 5~~
 60

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

195 220

1.) $\frac{7}{12} < \frac{11}{18}$

7 · 18
126



11 · 12
132

2.) $-\frac{5}{9} < -\frac{11}{21}$

-5 · 21
-105

-11 · 9
-99

< Greater than
> Less than

Order from Least to Greatest

$\frac{2}{3} = \frac{8}{12}$ (*4)
 $\frac{3}{4} = \frac{9}{12}$ (*3)
 $\frac{1}{2} = \frac{6}{12}$ (*6)

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

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

$\frac{8}{12}$ $\frac{9}{12}$ $\frac{6}{12}$

6 8 9

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

3: 1 · 3
4: ~~2 · 2~~
2: 2 · 1

LCM
3 · 2 · 2 = 12

16 12, 16, 18

18 $\frac{1}{2}$, $\frac{2}{3}$, $\frac{3}{4}$

12

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

Put in order from least to greatest.

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

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

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

$$\frac{3}{7} * 3 * 5 * 9 = 405$$

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

315, 378, 405, 420

$$\begin{array}{cccc} \downarrow & \downarrow & \downarrow & \downarrow \\ \frac{1}{3} & \frac{2}{5} & \frac{3}{7} & \frac{4}{9} \end{array}$$

$$0.\overline{75} = \frac{75 \div 25}{100 \div 25} = \frac{3}{4}$$

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

$$0.\overline{16} = \frac{16 \div 4}{100 \div 4} = \frac{4}{25}$$

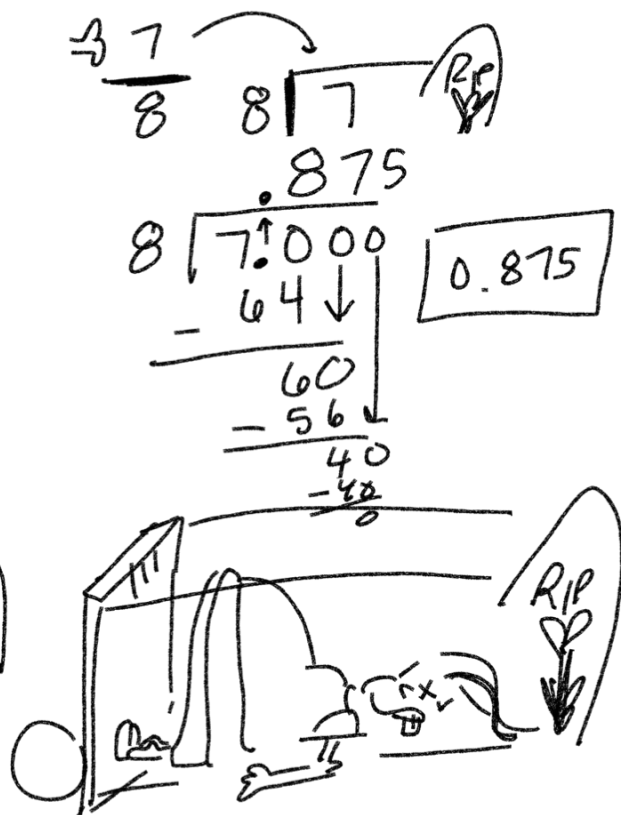
$$0.\overline{389} = \frac{389}{1000}$$

$$8.\overline{8} = \frac{88 \div 2}{10 \div 2} = \frac{44}{5} \text{ or } 4\frac{4}{5}$$

$$1.) 0.48 = \frac{48 \div 4}{100 \div 4} = \boxed{\frac{12}{25}} \quad 2.) 0.862 = \frac{862 \div 2}{1000 \div 2} = \boxed{\frac{431}{500}}$$

$$3.) 0.0004 = \frac{4 \div 4}{10000 \div 4} = \boxed{\frac{1}{2500}} \quad 4.) 25.2 = \frac{252 \div 2}{10 \div 2} = \boxed{\frac{126}{5}}$$

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



$$\frac{5}{16}$$

$$\frac{5}{16} = 0.3125$$

$$\begin{array}{r} 0.3125 \\ 16 \overline{) 5.0000} \\ \underline{-48} \downarrow \\ 20 \downarrow \\ \underline{-16} \downarrow \\ 40 \downarrow \\ \underline{-32} \downarrow \\ 8 \downarrow \\ \underline{-80} \\ 0 \end{array}$$