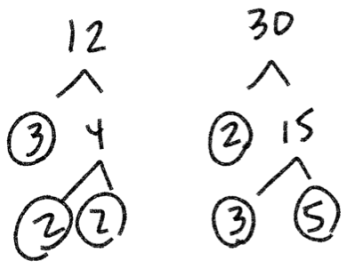


# S-PA Pre-Algebra Session 17 8/1

$$\frac{5}{12} < \frac{13}{30}$$



LCM

$$12: \cancel{3} \cdot \cancel{2} \cdot 2$$

$$30: 5 \cdot \cancel{3} \cdot 2$$

$$30 * 2 = 60$$

$$\frac{5}{12} = \frac{5 * 5}{12 * 5} = \frac{25}{60}$$

$$\frac{13}{30} = \frac{13 * 2}{30 * 2} = \frac{26}{60}$$

$$\frac{5}{12} < \frac{13}{30}$$

$$\downarrow \quad \downarrow$$

$$\frac{25}{60} < \frac{26}{60}$$

$$150 \quad \frac{5}{12} < \frac{13}{30} \quad \underline{\underline{156}}$$

$$\frac{-3}{7} > \frac{-9}{20}$$

$$-60 \quad \frac{-3}{7} > \frac{-9}{20} \quad -63$$

1.)  $0.\underline{\underline{18}} = \frac{18 \div 2}{100 \div 2} = \frac{9}{50}$  (reduce)

2.)  $2.\underline{\underline{4}} = \frac{24 \div 2}{10 \div 2} = \frac{12}{5}$  (reduce)

3.)  $0.\underline{\underline{064}} = \frac{64 \div 8}{1000 \div 8} = \frac{8}{125}$

4.)  $1.\underline{\underline{86}} = \frac{186 \div 2}{100 \div 2} = \frac{93}{50}$



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

$$\begin{array}{r} 0.875 \\ 8 \overline{) 7.000} \\ \underline{-64} \phantom{00} \\ 60 \phantom{0} \\ \underline{-56} \phantom{0} \\ 40 \\ \underline{-40} \\ 0 \end{array}$$

$$\frac{10}{16}$$

$$\begin{array}{r} 0.625 \\ 16 \overline{) 10.000} \\ \underline{-96} \phantom{00} \\ 40 \phantom{0} \\ \underline{-32} \phantom{0} \\ 80 \\ \underline{-80} \\ 0 \end{array}$$

$$\frac{10}{16} = \boxed{0.625}$$

$$0.4444\dots = 0.\overline{4}$$

$$\frac{4}{9} = 0.444\dots$$

$$\frac{7}{9} = 0.7777\dots$$

$$0.2222\dots = \frac{2}{9}$$

$$0.232323\dots = 0.\overline{23} = \frac{23}{99}$$

$$0.365365365\dots = 0.\overline{365} = \frac{365}{999}$$

$$6\frac{1}{3} - 2\frac{2}{5}$$

$$\begin{array}{r} 5\sqrt{6/15} \\ - 29 \\ \hline 36 \end{array}$$

$$\begin{array}{r} 6\frac{1}{3} \\ - 2\frac{2}{5} \\ \hline \end{array}$$

$$\begin{array}{r} \frac{1}{3} - \frac{2}{5} \\ \xrightarrow{*5} \\ \frac{1}{3} = \frac{5}{15} \\ \frac{2}{5} = \frac{6}{15} \\ \hline \frac{5}{15} - \frac{6}{15} \\ \xrightarrow{*3} \end{array}$$

$$\begin{array}{r} 5\cancel{6} \\ - 29 \\ \hline 36 \end{array}$$

$$\frac{1}{3} - \frac{2}{5}$$

$$\frac{5}{15} - \frac{6}{15}$$

$$5\frac{20}{15}$$

$$- 2\frac{6}{15}$$

$$\boxed{3\frac{14}{15}}$$

$$7\frac{2}{7}$$

$$\begin{array}{r} - 3\frac{5}{6} \\ \hline \end{array}$$

$$\frac{2}{7} - \frac{5}{6}$$

$$\begin{array}{r} \frac{2}{7} \xrightarrow{*6} \\ \frac{2}{7} = \frac{12}{42} \end{array}$$

$$\begin{array}{r} \frac{5}{6} \xrightarrow{*7} \\ \frac{5}{6} = \frac{35}{42} \end{array}$$

$$\xrightarrow{*7}$$

$$6\frac{12}{42} + \frac{42}{42}$$

$$- 3\frac{35}{42}$$

$$6\frac{54}{42}$$

$$- 3\frac{35}{42}$$

$$\boxed{3\frac{19}{42}}$$

$$\begin{array}{r} 8 \frac{4}{5} \\ + 3 \frac{2}{3} \\ \hline \end{array}$$

$$\begin{array}{r} 8 \frac{12}{15} \\ + 3 \frac{10}{15} \\ \hline \end{array}$$

$$11 \frac{22}{15}$$

$$11 \frac{22}{15}$$

$$11 + 1 \frac{7}{15} =$$

$$\boxed{12 \frac{7}{15}}$$

$$\frac{4}{5} \stackrel{*3}{=} \frac{12}{15}$$

$$\frac{2}{3} \stackrel{*5}{=} \frac{10}{15}$$

$$11 \frac{22}{15}$$

improper fraction

$$\rightarrow 1 \frac{22}{15}$$

$$\frac{22}{15} = 1 \frac{7}{15}$$

$$15 \overline{) 22} \\ \underline{-15} \\ 7$$

numerator