W-PA Pre-Algebra Week 22 3/1

1.) $\frac{5}{12} < \frac{13}{30}$

150 $\quad \frac{5}{12} \; ? \; \frac{13}{30} \quad$ 156

2.) $\frac{-3}{7} \; ? \; \frac{-9}{20}$

$-60 \quad (>) \quad -63$

12 : 3 · 4 ; 4 : 2 · 2

30 : 5 · 6 ; 6 : 3 · 2

LCM : $5 \cdot 3 \cdot 2 \cdot 2 = 60$

$\frac{5}{12} = \frac{25}{60}$ (*5) $\quad \frac{13}{30} = \frac{26}{60}$ (*2)

$\frac{5}{12} \rightarrow \frac{25}{60} < \frac{26}{60} \leftarrow \frac{13}{30}$

1.) $0.18 \rightarrow \frac{18 \div 2}{100 \div 2} = \boxed{\frac{9}{50}}$

2.) $0.064 \rightarrow \frac{64 \div 8}{1000 \div 8} = \boxed{\frac{8}{125}}$

3.) $2.4 \rightarrow \frac{24 \div 2}{10 \div 2} = \boxed{\frac{12}{5}}$

4.) $1.86 \rightarrow \frac{186 \div 2}{100 \div 2} = \boxed{\frac{93}{50}}$

$\frac{7}{8}$

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

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

$\frac{310}{16}$

$$
\begin{array}{r}
.625 \\
16\overline{)10.000} \\
-96 \\
\hline
40 \\
-32 \\
\hline
80 \\
-80 \\
\hline
0
\end{array}
$$

$\boxed{0.625}$

$0.44444\ldots = 0.\overline{4}$

$\frac{4}{9}$

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

$\frac{9}{9} = 0.999\ldots = 1$

$0.23232323\ldots = 0.\overline{23} = \frac{23}{99}$

$0.124124124\ldots = \frac{124}{999}$

$0.\overline{36} = \frac{36 \div 9}{99 \div 9} = \boxed{\frac{4}{11}}$

§ $0.633333\ldots = 0.6\overline{3}$ ✳ $\frac{63}{99}$

$n = 0.63333\ldots$

① $100n = 63.3333\ldots$

$-\ 10n = 6.3333\ldots$

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$\frac{90n}{90} = \frac{57}{90}$ $\quad n = \frac{57 \div 3}{90 \div 3} = \boxed{\frac{19}{30}}$

① Find number after the repeat starts

② Find the number before the repeat starts

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

$6\frac{1}{3}$

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

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$5\ \frac{5+15}{15}$

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

---

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

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

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

$6 = 5 + 1$

$5 + \frac{15}{15}$

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

$\frac{1}{3} = \frac{5}{15}$ (*5)

$\frac{2}{5} = \frac{6}{15}$ (*3)

5 15
~~6~~ 5
-26

$$7\frac{2}{7} - 3\frac{5}{6}$$

$$\frac{2}{7} = \frac{12}{42} \quad (*6)$$

$$\frac{5}{6} = \frac{35}{42} \quad (*7)$$

$$6\frac{12}{42} + \frac{42}{42} - 3\frac{35}{42}$$

$$6\frac{54}{42} - 3\frac{35}{42}$$

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