

Algebra I pg 516		
2.) a) 4.5 b) 0.045	12.) 2.45	22.) $\frac{38}{33}$
4.) -0.6, -0.06	14.) -6.75	24.) $\frac{12}{5}$
6.) 0.916	16.) 0.594	26.) $-\frac{15}{11}$
8.) 0.571428	18.) $\frac{33}{50}$	28.) $\frac{6}{7}$
10.) -0.46875	20.) $\frac{19}{5}$	30.) 0.6295

22) $1.\overline{15}$ $\overline{.15151515}$

$$\begin{array}{r} 100x = 15.\overline{15} \\ - x = \quad \overline{.15} \\ \hline 99x = 15 \end{array}$$

$x = \frac{15}{99}$

$\frac{15}{99} = \frac{5}{33}$

$$\begin{array}{r} 100x = 115.\overline{15} \\ - x = \quad \overline{.15} \\ \hline 99x = 114 \end{array}$$

$x = \frac{114}{99}$

24) $2.\overline{39}$

$$\begin{array}{r} 10x = 23.\overline{9} \\ - x = \quad \overline{2.39} \\ \hline 9x = 21.\overline{6} \end{array}$$

$\frac{21.\overline{6}}{9} = \frac{216}{90} = \frac{24}{10} = \frac{12}{5}$

26) $-1.\overline{36}$

$$\begin{array}{r} 100x = 36.\overline{36} \\ - x = \quad \overline{-1.36} \\ \hline 99x = 36 \end{array}$$

$x = \frac{36}{99}$

$-\frac{4}{11} = -\frac{15}{11}$

28) $\overline{.857142}$

$$\begin{array}{r} 1000000x = 857142.\overline{857142} \\ - x = \quad \overline{.857142} \\ \hline 999999x = 857142 \end{array}$$

$\frac{857142}{999999} = \frac{857142 \div 3}{999999 \div 3} = \frac{285714}{333333}$

$\frac{285714 \div 37}{333333 \div 37} = \frac{7722}{9009$

$\frac{7722 \div 12}{9009 \div 12} = \frac{643.5}{750.75}$

$\frac{643.5 \div 107.25}{750.75 \div 107.25} = \frac{6}{7}$

$\frac{66}{77} = \frac{6}{7}$

30) $\frac{5}{8}$ 0.634

0.625 0.634

.6295