

Math 085 - Quiz 14

November 19, 2013

Name key

Score _____

Show all your work to receive full credit. Supply explanations when necessary.
NO CALCULATORS ARE ALLOWED ON THIS QUIZ!

1. (2 points) Compute each of the following.

(a) $56.784 \times 0.001 = \boxed{0.056784}$

MOVE DECIMAL
PT LEFT 3 PLACES

(b) $0.32 \times 0.27 = \boxed{0.0864}$

$$\begin{array}{r} 32 \\ \times 27 \\ \hline 224 \\ 64 \\ \hline 864 \end{array}$$

(c) $-44.8 \div (-3.5) = \boxed{12.8}$

$$\begin{array}{r} 12.8 \\ 3.5 \overline{)44.8} \\ \underline{35} \\ 98 \\ \underline{70} \\ 280 \\ \underline{280} \\ 0 \end{array}$$

(d) $27.196 \div 0.01 = \boxed{2719.6}$

MOVE DECIMAL
PT RIGHT 2
PLACES

2. (1 point) Find the decimal equivalent of $\frac{5}{22}$.

$$\boxed{\frac{5}{22} = 0.22\overline{7}}$$

$$\begin{array}{r} 0.2272727... \\ 22 \overline{)5.000} \\ \underline{44} \\ 60 \\ \underline{44} \\ 160 \\ \underline{154} \\ 60 \end{array}$$

3. (2 points) Solve each equation. Write your answer in decimal form.

(a) $-5.7 + 4.8x = -14.82$

$$\begin{array}{r} -5.7 + 5.7 \\ \hline 4.8x = -9.12 \\ \underline{4.8} \\ 4.8x = -9.12 \end{array}$$

$$\begin{array}{r} 14.82 \\ -5.70 \\ \hline 9.12 \end{array}$$

$$\boxed{x = -1.9}$$

(b) $3x + 4 = 11x - 6$

$$\begin{array}{r} 3x + 4 = 11x - 6 \\ -3x -3x \\ \hline 4 = 8x - 6 \\ +6 +6 \\ \hline 10 = 8x \end{array}$$

$$\frac{10}{8} = \frac{8x}{8} \rightarrow$$

$$\boxed{x = 1.25}$$

$$\begin{array}{r} 1.25 \\ 8 \overline{)10.00} \\ \underline{8} \\ 20 \\ \underline{16} \\ 40 \\ \underline{40} \\ 0 \end{array}$$

$$\begin{array}{r} 1.9 \\ 4.8 \overline{)9.12} \\ \underline{48} \\ 432 \\ \underline{432} \\ 0 \end{array}$$