

Mr. Tallman

Homework #20 - One Step Equations with Decimals

Solve and check each equation. SHOW ALL WORK.

<p>1) $-8.4 = x - 6.3$ $+6.3$ $+6.3$ $x = -2.1$</p>	<p>Check $-8.4 = x - 6.3$ $-8.4 = -2.1 - 6.3$ $-8.4 = -2.1 + (-6.3)$ $-8.4 = -8.4 \checkmark$</p>	<p>2) $12.5 = x + 3$ -3 -3 $x = 9.5$</p>	<p>Check $12.5 = x + 3$ $12.5 = 9.5 + 3$ $12.5 = 12.5 \checkmark$</p>
<p>3) $-1.2x = -9.6$ -1.2 -1.2 $x = 8$</p>	<p>Check $-1.2x = -9.6$ $-1.2(8) = -9.6$ $-9.6 = -9.6 \checkmark$</p>	<p>4) $7.5 = -0.15x$ -0.15 -0.15 $x = -50$</p>	<p>Check $7.5 = -0.15x$ $7.5 = -0.15(-50)$ $7.5 = 7.5 \checkmark$</p>
<p>5) $\frac{y}{-3.5} = (20) - 3.5$ $y = -70$</p>	<p>Check $\frac{y}{-3.5} = 20 - 3.5$ $\frac{-70}{-3.5} = 20$ $20 = 20 \checkmark$</p>	<p>6) $\frac{z}{0.8} = (-0.6) \cdot 0.8$ $z = -0.48$</p>	<p>Check $\frac{z}{0.8} = -0.6$ $\frac{-0.48}{0.8} = -0.6$ $-0.6 = -0.6 \checkmark$</p>

Review

7) A diver is swimming at $3\frac{1}{2}$ feet below sea level. He then ascends $2\frac{3}{4}$ feet. What is the diver's current depth?

$$-3\frac{1}{2} + 2\frac{3}{4} \rightarrow -\frac{14}{4} + \frac{11}{4} = \left(-\frac{3}{4}\right) \text{ ft}$$

$$\begin{matrix} \times 2 & -\frac{7}{2} + \frac{11}{4} \\ \times 2 & -\frac{7}{2} + \frac{11}{4} \end{matrix}$$

8) Dan is on a diet and loses weight at a rate of 1.25 pounds per week. If he stays on this diet for 6.5 weeks, how much weight will Dan lose?

$$\begin{array}{r} 1.25 \\ \times 6.5 \\ \hline 625 \\ 7500 \\ \hline 8125 \end{array}$$

$$-1.25 \cdot 6.5$$

$$-8.125$$

Dan lost 8.125 pounds after 6.5 weeks

