Algebra 1 ECA Remediation   Name_____

Homework 3.1

Solve each proportion.

1) $\dfrac{x-6}{8} = \dfrac{x}{4}$

2) $\dfrac{v-3}{8} = \dfrac{v}{3}$

3) $\dfrac{a}{2} = \dfrac{a-3}{6}$

4) $\dfrac{6}{k-8} = \dfrac{7}{k+3}$

5) $\dfrac{n+9}{7} = \dfrac{n+3}{4}$

6) $\dfrac{p+7}{2} = \dfrac{p+6}{9}$

Solve each equation for the indicated variable.

7) $2x + 3y = 25$, solve for y

8) $-8m + 3n = -146$, solve for m

9) $V = \dfrac{1}{3}\pi r^2 \cdot h$, solve for h

10) $V = l \cdot w \cdot h$,   solve for w

Answers to Homework 3.1

1) $\{-6\}$

2) $\{-1.8\}$

3) $\{-1.5\}$

4) $\{74\}$

5) $\{5\}$

6) $\{-7.28\}$

7) $\{y = \dfrac{25 - 2x}{3}\}$

8) $\{m = \dfrac{146 + 3n}{8}\}$

9) $\{h = \dfrac{3V}{\pi r^2}\}$

10) $\{w = \dfrac{V}{hl}\}$