

Homework 3.2

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Solve each proportion.

1) $\frac{n-9}{6} = \frac{n}{4}$

2) $\frac{x+6}{2} = \frac{x}{10}$

3) $\frac{p-8}{9} = \frac{p}{5}$

4) $\frac{r+1}{4} = \frac{r+8}{3}$

5) $\frac{p-3}{8} = \frac{p+7}{9}$

6) $\frac{n+5}{3} = \frac{n+4}{9}$

Solve each equation for the indicated variable.

7) $296 = 5n - 3k$, solve for k

8) $86 = -2(-7a + 2b) - 5b$, solve for b

9) $V = \frac{4}{3}\pi r^3 \cdot h$, Solve for h

10) $A = \pi r^2 \cdot h$, solve for h

Answers to Homework 3.2

1) $\{-18\}$

5) $\{83\}$

9) $\left\{h = \frac{3v}{4\pi r^3}\right\}$

2) $\{-7.5\}$

6) $\{-5.5\}$

10) $\left\{h = \frac{A}{\pi r^2}\right\}$

3) $\{-10\}$

7) $\left\{k = \frac{5n - 296}{3}\right\}$

4) $\{-29\}$

8) $\left\{b = \frac{14a - 86}{9}\right\}$