

Solving Equations

Name _____

Section _____

$$\textcircled{1} \quad 3p + 2 = 29$$

$$\textcircled{2} \quad \frac{n}{2} - 5 = 3$$

$$\textcircled{3} \quad \frac{n-5}{2} = 5$$

$$\textcircled{\cancel{3}4} \quad -12r + 4 = 100$$

$$\textcircled{5} \quad 7(x + 3) = 49 \quad \textcircled{6} \quad 2x + 7x - 3 = 51$$

$$\textcircled{7} \quad 4x + 3 = 9x - 7 \quad \textcircled{8} \quad -2 = -(n - 8)$$

Solving Equations

Name Key

Section _____

$$\begin{array}{r} \textcircled{1} \quad 3p + 2 = 29 \\ \quad -2 \quad | \quad -2 \\ \hline 3p = 27 \\ \frac{3p}{3} = \frac{27}{3} \\ \boxed{p = 9} \end{array}$$

$$\begin{array}{r} \textcircled{2} \quad \frac{n}{2} - 8 = 3 \\ \quad \quad \quad | \quad +5 \\ \hline \frac{n}{2} = 11 \\ 2 \cdot \frac{n}{2} = 11 \cdot 2 \\ \boxed{n = 22} \end{array}$$

$$\begin{array}{r} \textcircled{3} \quad \frac{n-5}{2} = 5 \cdot 2 \\ \quad \quad \quad | \\ n-5 = 10 \\ \quad +5 \quad | \quad +5 \\ \hline \boxed{n = 15} \end{array}$$

$$\begin{array}{r} \textcircled{4} \quad -12r + 4 = 100 \\ \quad \quad \quad | \quad -4 \\ \hline -12r = 96 \\ \frac{-12r}{-12} = \frac{96}{-12} \\ \boxed{r = -8} \end{array}$$

$$\textcircled{5} \quad 7(x+3) = 49$$

$$7x + 21 = 49$$

$$\begin{array}{r|l} -21 & -21 \\ \hline \end{array}$$

$$\frac{7x}{7} = \frac{28}{7}$$

$$\boxed{x = 4}$$

$$\textcircled{6} \quad 2x + 7x - 3 = 51$$

$$9x - 3 = 51$$

$$\begin{array}{r|l} +3 & +3 \\ \hline \end{array}$$

$$\frac{9x}{9} = \frac{54}{9}$$

$$\boxed{x = 6}$$

$$\textcircled{7} \quad \cancel{4}x + 3 = 9x - 7$$

$$-4x$$

$$-4x$$

$$\begin{array}{r|l} \hline \end{array}$$

$$\begin{array}{r|l} 3 & 9x - 7 \\ +7 & -4x \end{array}$$

$$\begin{array}{r|l} \hline \end{array}$$

$$\frac{10}{5} = \frac{5x}{5}$$

$$\boxed{2 = x}$$

$$\textcircled{8} \quad -2 = -1(n-8)$$

$$-2 = -n + 8$$

$$-8 \quad -8$$

$$\begin{array}{r|l} \hline \end{array}$$

$$\frac{-10}{-1} = \frac{-1n}{-1}$$

$$\boxed{10 = n}$$