

NAME _____

DATE _____

ONE & TWO STEP EQUATIONS: Worksheet 2

Solve each equation for the given variable.

1) $x + 3 = 24$

2) $n - 7 = 9$

3) $7y = 42$

4) $t - 5 = -6$

5) $-5x = -30$

6) $\frac{p}{-4} = 3$

7) $9x - 2 = 43$

8) $\frac{y}{2} + 6 = 10$

9) $-10w - 4 = 16$

10) $\frac{x}{6} + 1 = 13$

KEY

ONE & TWO STEP EQUATIONS: Worksheet 2

Solve each equation for the given variable.

$$1) \quad x + 3 = 24 \qquad \begin{aligned} x + 3 &= 24 \\ x + 3 - 3 &= 24 - 3 \\ x &= 21 \end{aligned}$$

$$2) \quad n - 7 = 9 \qquad \begin{aligned} n - 7 &= 9 \\ n - 7 + 7 &= 9 + 7 \\ n &= 16 \end{aligned}$$

$$3) \quad 7y = 42 \qquad \begin{aligned} 7y &= 42 \\ 7y \div 7 &= 42 \div 7 \\ y &= 6 \end{aligned}$$

$$4) \quad t - 5 = -6 \qquad \begin{aligned} t - 5 &= -6 \\ t - 5 + 5 &= -6 + 5 \\ t &= -1 \end{aligned}$$

$$5) \quad -5x = -30 \qquad \begin{aligned} -5x &= -30 \\ -5x \div -5 &= -30 \div -5 \\ x &= 6 \end{aligned}$$

$$6) \quad \frac{p}{-4} = 3 \qquad \begin{aligned} \frac{p}{-4} &= 3 \\ \frac{p}{-4} \cdot -4 &= 3 \cdot -4 \\ p &= -12 \end{aligned}$$

$$7) \quad 9x - 2 = 43 \qquad \begin{aligned} 9x - 2 &= 43 \\ 9x - 2 + 2 &= 43 + 2 \\ 9x &= 45 \\ 9x \div 9 &= 45 \div 9 \\ x &= 5 \end{aligned}$$

$$8) \quad \frac{y}{2} + 6 = 10 \qquad \begin{aligned} \frac{y}{2} + 6 &= 10 \\ \frac{y}{2} + 6 - 6 &= 10 - 6 \end{aligned} \quad \begin{aligned} \frac{y}{2} &= 4 \\ \frac{y}{2} \cdot 2 &= 4 \cdot 2 \\ y &= 8 \end{aligned}$$

$$9) \quad -10w - 4 = 16 \qquad \begin{aligned} -10w - 4 &= 16 \\ -10w - 4 + 4 &= 16 + 4 \\ -10w &= 20 \\ -10w \div -10 &= 20 \div -10 \\ w &= -2 \end{aligned}$$

$$10) \quad \frac{x}{6} + 1 = 13 \qquad \begin{aligned} \frac{x}{6} + 1 &= 13 \\ \frac{x}{6} + 1 - 1 &= 13 - 1 \\ \frac{x}{6} &= 12 \\ \frac{x}{6} \cdot 6 &= 12 \cdot 6 \\ x &= 72 \end{aligned}$$