

Two-Step Equations Practice

April 26
Worksheet

Date

Period

Solve each equation.

1) $3 + 5r = -47$

$$\begin{array}{r} -3 + 3 + 5r \\ -47 - 3 \end{array}$$

$$\frac{5r}{5} = \frac{-50}{5}$$

$$r = -10$$

2) $-5 + \frac{n}{3} = -8 + 5$

$$3 \times \frac{n}{3} = -3 \times 3$$

$$n = -9$$

3) $-53 = 3 - 8n$

$$3 - 8n = -53 - 3$$

$$\frac{-8n}{-8} = \frac{-56}{-8}$$

$$n = 7$$

4) $\frac{b}{2} - 2 = 0$

$$\frac{b}{2} - 2 + 2 = 0 + 2$$

$$2 \cdot \frac{b}{2} = 2 \cdot 2$$

$$b = 4$$

5) $-10x + 6 = -74$

$$-10x + 6 - 6 = -74 - 6$$

$$\frac{-10x}{-10} = \frac{-80}{-10}$$

$$x = 8$$

6) $\frac{m}{9} - 7 = -8$

$$\frac{m}{9} - 7 + 7 = -8 + 7$$

$$9 \times \frac{m}{9} = -1 \times 9$$

$$m = -9$$

7) $3 - 5v = -22$

$$3 - 5v = -22 - 3$$

$$\frac{-5v}{-5} = \frac{-25}{-5}$$

$$v = 5$$

8) $9 + \frac{r}{6} = 7$

$$-9 + 9 + \frac{r}{6} = 7 - 9$$

$$6 \cdot \frac{r}{6} = -2 \cdot 6$$

$$r = -12$$

9) $-8 = -3 + \frac{m}{3}$

$$3 + -8 = -3 + 3 + \frac{m}{3}$$

$$3 \cdot -5 = \frac{m}{3} \cdot 3$$

$$-15 = m$$

10) $7 = \frac{x}{9} + 8$

$$7 - 8 = \frac{x}{9} + 8 - 8$$

$$9 \cdot -1 = \frac{x}{9} \cdot 9$$

$$-9 = x$$

$$11) 8 + 9v = 8$$

$$8 - 8 + 9v = 8 - 8$$

$$\frac{9v}{9} = \frac{0}{9}$$

$$v = 0$$

$$13) -9 + 2n = -29$$

$$-9 + 9 + 2n = -29 + 9$$

$$\frac{2n}{2} = \frac{-20}{2}$$

$$n = -10$$

$$15) 9 + \frac{p}{8} = 7$$

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

$$8 \times \frac{p}{8} = -2 \times 8$$

$$p = -16$$

$$17) 10 + \frac{x}{3} = 4$$

$$-10 + 10 + \frac{x}{3} = 4 - 10$$

$$3 \cdot \frac{x}{3} = -6 \cdot 3 \quad \boxed{x = -18}$$

$$19) 21 = -4x - 7$$

$$21 + 7 = -4x - 7 + 7$$

$$\frac{28}{-4} = \frac{-4x}{-4}$$

$$\boxed{-7 = x}$$

$$12) 7 - 9m = -11$$

$$-7 + 7 - 9m = -11 - 7$$

$$\frac{-9m}{-9} = \frac{-18}{-9}$$

$$\boxed{m = 2}$$

$$14) -6r + 3 = -39$$

$$-6r + 3 - 3 = -39 - 3$$

$$\frac{-6r}{-6} = \frac{-42}{-6}$$

$$\boxed{r = 7}$$

$$16) 4n - 7 = -59$$

$$4n - 7 + 7 = -59 + 7$$

$$\frac{4n}{4} = \frac{-52}{4}$$

$$\boxed{n = -13}$$

$$18) 3 + 9n = -150$$

$$3 - 3 + 9n = -150 - 3$$

$$\frac{9n}{9} = \frac{-153}{9}$$

$$n = \boxed{-17}$$

$$20) 2x - 7 = -23$$

$$2x - 7 + 7 = -23 + 7$$

$$\frac{2x}{2} = \frac{-16}{2}$$

$$x = -8$$