

Solving Two Step Equations

$$\frac{3x}{3} = \frac{2}{3} \quad x = \frac{2}{3}$$

$$3x - 4 = 2$$

$$\frac{3x}{3} = \frac{6}{3}$$

$$x = 2$$

$$\begin{array}{r} -7 = 2y + 1 \\ -1 \qquad \qquad -1 \end{array}$$

$$\frac{-8}{2} = \frac{2y}{2}$$

$$-4 = y$$

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

$$\begin{array}{r} -2 \qquad -2 \\ -8 \qquad -8 \\ \frac{n}{-8} = -5 \end{array}$$

$$n = 40$$

$$6 + \frac{3}{k} = 6$$

$$k \quad \frac{3}{k} = 0 \quad k$$

$$3 = 0$$

$$\{\emptyset\}$$

$$6 + \frac{3}{k} = 24$$

$$k \cdot \frac{3}{k} = 18 \cdot k$$

$$\frac{3}{18} = \frac{18k}{18}$$

$$k = \frac{3}{18} = \frac{1}{6}$$

Simplifying Like Terms
Adding and Subtracting
Like terms

$$3x + 6x = 9x$$

To combine like terms

1-Determine which terms contain the same variable or groups of variables raised to the same exponent.

2-Add or subtract the numerical coefficients.

3-Attach the common variables and exponents.

$$\begin{aligned}3x + 2x &= 5x \\3x + 2y &= 3x + 2y \\3x^2y + 2x^2y &= 5x^2y \\3x^2y + 2xy &= \end{aligned}$$



$$6c^2 + 19c^2 =$$

$$|x^4 + 3x^2 =$$

$$2xy^3 + 101xy^3 =$$

$$-km^2x^5 + 17km^2x^5 =$$

$$5vk^3 + vk^2 =$$

$$(5vk^3)(vk^2) = 5v^2k^5$$

$$9(4+d)$$

$$36 + 9d$$

$$-3m + 4 - 5m$$

$$4 - 8m$$

$$-8m + 4$$

$$2h + 4(h - 5)$$

$$2h + 4h - 20$$

$$6h - 20$$

$$2x + 4(h - 5)$$

$$2x + 4h - 20$$

$$2x + 3y + 2x - 2y + 4$$

$$4x + 1y + 4$$

Simplifying and Solving Equations

$$-8 = 2 + 3z$$

$$\frac{-10}{3} = \frac{3z}{3} \quad z = -3.3333$$
$$-3\frac{1}{3}$$

$$J + 5(J - 1) = 13$$

$$J + 5J - 5 = 13$$

$$6J - 5 = 13$$

$$+5 \quad +5$$

$$\frac{6J}{6} = \frac{18}{6}$$

$$J = 3$$

$$3a + 12 - 6a = -9$$
$$-3a + 12 = -9$$

$$\frac{-3a}{-3} = \frac{-21}{-3}$$

$$a = 7$$

$$5s - 2 + 3(s - 11) = 5$$

$$5s - 2 + 3s - 33 = 5$$

$$8s - 2 - 33 = 5$$

$$8s - 35 = 5$$

$$\frac{8s}{8} = \frac{40}{8}$$

$$s = 5$$

1) $3s - 4 = 8$

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

3) $5 + \frac{k}{9} = -31$

4) $4m + 8 = 4$

5) $1.2 = 3s - 1.8$

6) $\frac{n}{4} - 1 = 10$

7) $14z = -8 + 6z$

8) $7m = 9(m + 4)$

9) $2(1.5a + 4) - 6a = -7$

10) $3t + 14 = 42 - t$

11) $9(k - 10) = -k$

12) $8 - 3(p - 4) = -2p$

13) $2b - 8 = -b + 7$

14) $18 = 2(3k + 1) - k$

15) $4(x - 5) = x + 4 - 5x$