

# Solve Equations With Like Terms



**Like terms** are terms that have the same variables raised to the same powers. You can combine the like terms on each side of an equation to help solve the equation.

**Let's try it!** Solve  $4h + 3 + 3h - 9 = 36$ .

First, find and combine like terms, paying attention to the signs.  $4h$  and  $3h$  are like terms, and  $3$  and  $-9$  are like terms.

Then, use inverse operations to solve.

$$4h + 3 + 3h - 9 = 36$$

$$7h - 6 = 36$$

$$7h - 6 + 6 = 36 + 6$$

$$7h = 42$$

$$\frac{7h}{7} = \frac{42}{7}$$

$$h = 6$$

**Practice!** Solve each equation.

1

$$-7m + 10m - 8 = 25$$

2

$$12w - 7 - 3w = -61$$

3

$$8c - c - 9c + 6 = 40$$

4

$$9t + 3t - 17t + 4 = 49$$

5

$$-d + 11 - 4d + 9d = -17$$

6

$$5g + 2g + g + 6 - 7 = 23$$

7

$$15 - 8k + 15k - 8 = 42$$

8

$$-3a + 1 - 4a - 6 + a = 7$$