Solve Equations With Like Terms

Level 2

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

$m = 11$

2 $12w - 7 - 3w = -61$

$w = -6$

3 $8c - c - 9c + 6 = 40$

$c = -17$

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

$t = -9$

5 $-d + 11 - 4d + 9d = -17$

$d = -7$

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

$g = 3$

7 $15 - 8k + 15k - 8 = 42$

$k = 5$

8 $-3a + 1 - 4a - 6 + a = 7$

$a = -2$