

10.2 Key Concepts 1 Solving Equations With Multiple Terms Worked Example

Example: Solve for x : $5x + 2 = 2x - 1$.

Solution: Collect variable terms on one side and constant terms on the other.

$$\begin{aligned}5x + 2 &= 2x - 1 \\5x - 2x &= -1 - 2 \\3x &= -3 \\\frac{3x}{3} &= \frac{-3}{3} \\x &= -1\end{aligned}$$

Practice:

1. Solve for y : $3y - 1 = -2y + 9$.

2. Solve for v : $5v - 6 = 18 - 3v$.

Answers: 1. $y = 2$, 2. $v = 3$