

2.1 Solving Equations that have Variables on Both Sides - Day 2

Solve:

$$\begin{aligned} 1. \quad & 5 - 3(a + 6) = a - 1 + 8a \\ & 5 - 3(a) - 3(6) = a - 1 + 8a \\ & 5 - 3a - 18 = a - 1 + 8a \\ & -13 - 3a = 9a - 1 \\ & -13 - 3a - 9a = -1 \\ & -13 - 12a = -1 \\ & -12a = -1 + 13 \\ & -12a = 12 \\ & a = \frac{12}{-12} \\ & \boxed{a = -1} \end{aligned}$$

$$\begin{aligned} 2. \quad & -4(7x - 4) = 7(-6x - 7) - 5 \\ & -4(7x) - 4(-4) = 7(-6x) + 7(-7) - 5 \\ & -28x + 16 = -42x - 49 - 5 \\ & -28x + 16 = -42x - 54 \\ & -28x + 42x + 16 = -54 \\ & 14x + 16 = -54 \\ & 14x = -54 - 16 \\ & 14x = -70 \\ & x = \frac{-70}{14} \\ & \boxed{x = -5} \end{aligned}$$

HOMEWORK

Worksheet - HW 2.1 - Day 8