

Multi-Step Equations with Variables on Both Sides Date _____ Period _____

Solve each equation.

1) $-2 = x + 8 - 4$

2) $24 = 5k - k$

3) $-14 = v + 4 + 5v$

4) $-5m + 6m = -2$

5) $0 = -7n - 5n$

6) $-4(-1 + 4p) = -60$

7) $44 = 4(2 - 3m) + 3m$

8) $-57 = -3(4n + 2) - 3$

9) $-3(-4m + 3) = -57$

10) $-60 = -4(4x - 1)$

11) $\frac{3x}{4} + \frac{5}{4} = \frac{11}{4}$

12) $-\frac{x}{4} + \frac{1}{5} = \frac{7}{10}$

$$13) -8 + 8b = 7b + 3b$$

$$14) -8 - 2k = 4k - 7k$$

$$15) 3a - 5a = -10 - 2a + 2 + 8$$

$$16) -2 - 2k = k + 13$$

$$17) 39 + 7x = -5(x - 4) - 7x$$

$$18) 4 - 7(a - 5) = -7a + 42$$

$$19) -5 - 6(1 + 8m) = -4m - 11$$

$$20) -5(n - 1) = -4n - 3$$

Answers to Multi-Step Equations with Variables on Both Sides (ID: 1)

- 1) $\{-6\}$ 3) $\{-3\}$ 5) $\{0\}$ 7) $\{-4\}$
9) $\{-4\}$ 11) 2 13) $\{-4\}$
15) $\{\text{All real numbers.}\}$ 17) $\{-1\}$ 19) $\{0\}$