

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

$$11) -8 + 8b = 7b + 3b$$

$$12) -8 - 2k = 4k - 7k$$

$$13) 3a - 5a = -10 - 2a + 2 + 8$$

$$14) -2 - 2k = k + 13$$

$$15) 39 + 7x = -5(x - 4) - 7x$$

$$16) 4 - 7(a - 5) = -7a + 42$$

$$17) -5 - 6(1 + 8m) = -4m - 11$$

$$18) -5(n - 1) = -4n - 3$$

$$19) \frac{3x}{4} + \frac{5}{4} = \frac{11}{4}$$

$$20) -\frac{x}{4} + \frac{1}{5} = \frac{7}{10}$$

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

1) $\{-6\}$
9) $\{-4\}$
15) $\{-1\}$

3) $\{-3\}$
11) $\{-4\}$
17) $\{0\}$

5) $\{0\}$
13) $\{\text{All real numbers.}\}$
19) 2

7) $\{-4\}$