

# Multiple-Step Equations Worksheet Answer Key

## *A Low-Impact Alternative to Walking*

Solve the following equations.

1.  $4(x + 3) = 28$

$$x = 4$$

2.  $2a + 3(a + 4) = 30$

$$a = 3\frac{3}{5}$$

3.  $38 = -\frac{8}{5}(w + 2) - 2$

$$w = 27$$

4.  $\frac{1}{8}(a + 18) = |-10|$

$$a = 62$$

5.  $\frac{3}{4}(b + 20) = 16$

$$b = \frac{4}{3}$$

6.  $6\left(\frac{1}{t-1} + 1\right) = 6$

No solution

7.  $6\left(\frac{1}{t-1} + 1\right) = \frac{1}{6}$

$$t = \frac{-1}{35}$$

8.  $[1 - 2|w^2| + 3(w - 1)] = w(5 + \frac{1}{w})$

$$w = -\frac{3}{4}$$

9.  $8y + \frac{1}{4} = 5(\frac{y}{4} - 3)$

$$y = -\frac{61}{27}$$

10.  $0.8[2(u - 3) - 4(1 - 2u)] = 5 - u$

$$u = \frac{13}{9}$$

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