



## L 2.8 Literal Equations and Dimensional Analysis

10 Questions

NAME : \_\_\_\_\_

CLASS : \_\_\_\_\_

DATE : \_\_\_\_\_

1. The area of a rectangle is  $A = bh$ . Solve the formula for  $h$ .

☐ a)  $h = A - b$

☐ b)  $h = b/A$

☐ c)  $h = Ab$

☐ d)  $h = A/b$

2. Solve the equation for  $m$ .

$$7m - 4n = 8$$

☐ a)  $m = (8 + 4n)/7$

☐ b)  $m = 8/7 + 4n$

☐ c)  $m = (8 - 4n)/7$

3. Which expression represents the value of  $x$  in the equation:

$$dx + e = f$$

☐ a)  $x = (f + e)/d$

☐ b)  $x = (f - e)/d$

☐ c)  $x = d/(e - f)$

☐ d)  $x = d/(e + f)$

4. 
$$\frac{b - 4z}{7} = a, \text{ for } b$$

☐ a)  $b = 7a - 4z$

☐ b)  $b = 7(a + 4z)$

☐ c)  $b = 7a/-4 + z$

☐ d)  $b = 7a + 4z$

5. How many kilograms of calcium are there in 173 pounds of calcium? (1 pound = 454 grams; 1 kg = 1000 g)

☐ a) 1.10 kg

☐ b) 78.5 kg

☐ c) 110 kg

☐ d) 78500 kg



Help

6.

$$p = \frac{w}{a}$$

Solve for a.

☐ a)  $a = pw$

☐ b)  $a = p/w$

☐ c)  $a = w/p$

☐ d)  $a = w + p$

7. Solve for y:

$$8x + 4y = 12$$

☐ a)  $y = -x + 3$

☐ b)  $y = 2x - 3$

☐ c)  $y = -2x + 3$

☐ d)  $y = -2x - 3$

8. 64 miles/hour  $\approx$  \_\_\_\_\_ feet/second

☐ a) 337,902 feet / second

☐ b) 93.86 feet / second

☐ c) 5632 feet / second

9. 110 miles/hour = \_\_\_\_\_ miles/day

☐ a) 4.58 miles/day

☐ b) 6600 miles/day

☐ c) 2640 miles/day

10.

$$y = \frac{x - v}{b}$$

Solve for x:

☐ a)  $x = yb - v$

☐ b)  $x = by - v$

☐ c)  $x = by + v$