



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. $\frac{b - 4z}{7} = a$, 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) $x = by + v$