

CCGPS Coordinate Algebra Day 13 Unit 1 Relationships Among Quantities  
 5. What is Heidi's final velocity if she accelerates at 2 feet per second squared for 3 seconds with an initial velocity of 4 feet per second?

The formula for computing the balance of an account with compound interest added annually is  $A=P(1+r)^t$  where A represents the amount of money in the account including interest, P is the amount in the account before interest and r is the interest rate written as a decimal

- 6) If Holly wants a total of \$1000 in the bank in a year and has an interest rate of 4% how much money should she put in the bank initially?
- 7) Should she initially invest more or less if she wants the same return but the interest rate goes down?

**Homework: Practice Problems**

Rewrite each equation in terms of the indicated (Letter).

1)  $P = IR T$  (T)  
 $T = \frac{P}{IR}$

2)  $P = 2(L + W)$  (W)  
 $\frac{P}{2} = L + W$   
 $W = \frac{P}{2} - L$

3)  $v = 5x - 6$  (x)  
 $\frac{y+6}{5} = x$

4)  $2x - 2y = 8$  (y)  
 $8 - 2x = y$   
 $y = 2 + b$

5)  $\frac{x+y}{3} = 5$  (x)  
 $x + y = 15 - y$   
 $x = 15 - y$

6)  $y = mx + b$  (b)  
 $b = y - mx$

7)  $ax + by = c$  (y)  
 $\frac{c - ax}{b} = y$

8)  $2A = h(b + c)$  (b)  
 $\frac{2A}{h} = b + c$   
 $b = \frac{2A}{h} - c$

9)  $V = LWH$  (L)  
 $L = \frac{V}{WH}$

10)  $A = 4\pi r^2$  (r)  
 $r^2 = \frac{A}{4\pi}$   
 $r = \sqrt{\frac{A}{4\pi}}$