

The formula for computing the balance of an account with compound interest added annually is  $A = P(1 + r)^n$  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

5. 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**?

**Homework:** Practice Problems

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

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

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

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

4)  $2x - 3y = 8$  (y)  
 $\frac{2x - 3y}{-3} = \frac{8}{-3}$   
 $\frac{-3y}{-3} = \frac{8 - 2x}{-3}$        $y = \frac{8 - 2x}{-3}$

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

6)  $y = mx + b$  (b)  
 $\frac{y - mx}{-m} = \frac{b}{-m}$   
 $b = y - mx$

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

8)  $A = \frac{1}{2}h(b + c) \cdot 2(b)$   
 $\frac{2a}{h} = \frac{h(b + c)}{h}$   
 $\frac{2a}{h} = b + c$        $\frac{2a}{h} - c = b$

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

10)  $A = 4\pi r^2$  (r<sup>2</sup>)  
 $\frac{A}{4\pi} = \frac{4\pi r^2}{4\pi}$   
 $r^2 = \frac{A}{4\pi}$