

#1

THE SUM OF 5 AND TWICE A NUMBER IS 35

$$\begin{array}{c} 5 + 2x \\ \hline = 35 \end{array}$$

$$2x = 35 - 5$$

$$2x = 30$$

$$\frac{2x}{2} = \frac{30}{2}$$

$$x = 15$$

#2

9	1st odd = X
11	2nd odd = X+2
13	3rd odd = X+4
15	4th odd = X+6

$$\begin{array}{l} 3 \\ 5 = 3+2 \\ 7 = 3+4 \\ 9 = 3+6 \end{array}$$

$$x + x + 2 + x + 4 + x + 6 = 48$$

$$4x + 12 = 48$$

$$4x = 48 - 12$$

$$4x = 36$$

$$\frac{4x}{4} = \frac{36}{4}$$

$$x = 9$$

#3

21000  
29000

JOHN = X - 8000

20,000 - 8,000

BILL = X

29,000

$$x + x - 8000 = 50000$$

$$2x - 8000 = 50000$$

$$2x = 50000 + 8000$$

$$2x = 58000$$

$$\frac{2x}{2} = \frac{58000}{2}$$

$$x = 29000$$

#4

STOCKS = X (37500) 30,000

BONDS =  $\frac{1}{3}X$  (12500)  $\frac{1}{3}(30000)$

$$x + \frac{1}{3}x = 50000$$

$$3(x) + 3(\frac{1}{3}x) = 3(50000)$$

$$3x + x = 150000$$

$$4x = 150000$$

$$\frac{4x}{4} = \frac{150000}{4}$$

$$x = 37500$$

$$\begin{array}{r} 37500 \\ 4 \overline{) 150000} \\ \underline{12} \phantom{00} \\ 30 \phantom{00} \\ \underline{28} \phantom{00} \\ 20 \end{array}$$

#5

10  
20  
30

SHIRT = X - 8

20 - 8 = 12

PANTS = X

20

SHOES = X + 10

20 + 10 = 30

$$x - 8 + x + x + 10 = 60$$

$$3x + 2 = 60$$

$$3x = 60 - 2$$

$$3x = 58$$

$$\frac{3x}{3} = \frac{58}{3}$$

$$x = 20$$

#6

ABC

XYZ

$$10 + .20x = .25x$$

$$10 = .25x - .20x$$

$$.25x - .20x$$

$$10 = .05x$$

$$\frac{10}{.05} = \frac{.05}{.05} x$$

$$200 = x$$