

#8 $JUDY = \frac{1}{5}X$ (1) #9
 $LINDA = X$ (5)

$$\frac{1}{5}X + X = 6$$

$$5(\frac{1}{5}X) + 5(X) = 5(6)$$

$$X + 5X = 30$$

$$6X = 30$$

$$\frac{6X}{6} = \frac{30}{6}$$

$$X = 5$$

~~PRICE~~
 $PRICE + (PRICE) \text{ TAX RATE} = \text{FINAL BILL}$

$$45.12 + (45.12)(3.11\%) = F$$

$$45.12 + (45.12)(.0311) = F$$

$$\$46.52 = F$$

$$\text{COST} + (\text{COST})(.14) = \text{C.C. Amt}$$

$$70 + (70)(.14) = \text{C.C. Amt}$$

~~1X~~ $1X + (X)(.14) = 70$

$$1.14X = 70$$

$$\frac{1.14X}{1.14} = \frac{70}{1.14}$$

$$X = 61.40$$

#10 $\text{COST} + (\text{COST})(\text{MARKUP \%}) = \text{PRICE}$

$$X + (X)(25\%) = 110$$

$$X + .25X = 110$$

$$1.25X = 110$$

$$\frac{1.25X}{1.25} = \frac{110}{1.25}$$

$$X = 88$$

#11

BONDS = $\frac{1}{3}X$ (10000)
 STOCKS = X (30000)

$$\frac{1}{3}X + X = 40000$$

$$3(\frac{1}{3}X) + 3(X) = 3(40000)$$

$$X + 3X = 120000$$

$$4X = 120,000$$

$$\frac{4X}{4} = \frac{120,000}{4}$$

$$X = 30,000$$

#12

HE LOAN $(X \text{ Amt})(.05 \text{ \%}) + (1,000,000 \text{ Amt})(.15 \text{ \%}) = (1,000,000 \text{ Amt})(.10 \text{ \%})$

~~25%~~

~~1,000,000~~

$$.05X + 150,000 - .15X = 100,000$$

$$-.1X = 100,000 - 150,000$$

$$-.1X = -50,000$$

$$\frac{-.1X}{-.1} = \frac{-50,000}{-.1}$$

$$X = 500,000 \text{ HE LOAN}$$

$$500,000 \text{ P LOAN}$$