



$$\text{Loop A: } 9 - 3.3 = 6 I_A + 4.7 (I_A - I_B)$$

$$\text{Loop B: } 3.3 - 5 = 4.7 (I_B - I_A) + 2.2 I_B$$

$$5.7 = 10.7 I_A - 4.7 I_B$$

$$-1.7 = -4.7 I_A + 6.9 I_B$$

$$I_A = .5327 + .4393 I_B$$

$$-1.7 = -4.7 (.5327 + .4393 I_B) + 6.9 I_B$$

$$-1.7 = -2.5037 - 2.0647 I_B + 6.9 I_B$$

$$.8037 = 4.8353 I_B$$

$$.1662 \text{ mA } I_B$$

$$.6057 \text{ mA} = I_A$$

current through 2.4 =  $I_A = .6057 \text{ mA}$

current through 4.7 =  $I_A - I_B = .4395 \text{ mA}$

voltage across 2.2 =  $2.2 (I_B) = .3656 \text{ V}$