**Extra Credit 9 – 12**

**Extra #9**

**Solve by graphing (no calculator)**

**1.** 3x – y = 0  **2.** 2y – 8 = x **3.** x – 2y = 0

 x – y = -2 y = $\frac{1}{2}$x + 4 y = 2x - 3

**Extra #10**

**Solve using substitution**

**1.** 2x + y = 4 **2.** x – 9 = 3y

 3x + 2y = 1 x + 2y = -1

**Solve using elimination.**

**3.** 6x + 3y = 6 **4**. $\frac{3x-y}{2}$ = 5

 8x + 5y = 12 $\frac{4x-y}{4}$ = 4

**Solve using either substitution or elimination**.

**5.** 8x + 3y + 5 = 0 **6.** $\frac{2}{5}$x - $\frac{3}{4}$y = -2

 10x + 6y + 13 = 0 $\frac{1}{2}$x + $\frac{1}{4}$y = 7

**Extra #11**

**Calculators allowed**

**Define 2 variables, write equations, solve by any method (substitution, elimination, graphing), and label your answers correctly.**

**1.** Karamagu had 50 nickels and dimes whose value was $4. How many of each kind of coin

 did he have?

**2.** The sum of 2 numbers is 18 less than twice the first number. Their difference is 32 less

 than twice the second number. Find the numbers.

**3.** The tens digit of a 2 digit number is 1 more than 4 time the units digit. If 63 is subtracted

 from the number, the order of the digits is reversed. Find the number.

**Extra #12**

**Graph each inequality**

**1.** 3 – x > 0 **2.** 2y – 5x < 8

**Solve by graphing**

**3.** x > -2 **4.** y $\leq $ 2x – 3

 2y $\geq $ 3x + 6 y $\leq $ $\frac{-1}{2}$x + 2

**5.** y > -x – 2 **6.** x > -1

 y $\leq $ 3x + 2 y < $\frac{2}{3}$x + 2

 3y > 4x