## Substitution Worksheet *\*due next class!*

1. Solve each of the following systems of linear equations by substitution. Please show a check of your answers!

 **a)** 2*x* – 3*y* + 17 = 0 b) 4*x* + *y* = 1

 *y* = –5*x x* = 2*y* – 20

 **c)** *x* – 3*y* = 4 **d**) –3*x* + *y* = –3

 5*x* – 7*y* = 4 5*x* – 2*y* = 10

 e) 0.4*x* + *y* = 6 **f**) 8*x* + *y* – 2 = 0

 1.2*x* – 5*y* = 18 3*x* + *y* = 0

1. For the system of linear equations: 2*x* – *y* = –7

 3*x* + 2*y* = 5

a) Solve the system by drawing a graph. b) Solve the system by substitution.

**c)** Which method did you prefer? Why?

1. Maria has a total of 20 nickels and quarters. She has four times as many nickels as quarters. How much money does Maria have?

 **4.** The perimeter of a rectangle is 48 cm. The width is one third the length. Determine the dimensions of the rectangle.