Quiz 4

17 September 2009

Show all work to support your solution. Be sure to check your solutions.

1. (4 Points) Give the equation of the circle centered at $(-2, 3)$ with radius 9.

$$h = -2, \quad k = 3, \quad r = 9$$

$$(x - (-2))^2 + (y - (3))^2 = (9)^2$$

$$(x + 2)^2 + (y - 3)^2 = 81$$

2. Consider the linear equation $4x - 3y = -6$.

   (a) (4 Points) Represent the solution set as a function of x, if possible.

$$-3y = -4x - 6$$

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

$$f(x) := \frac{4}{3}x + 2$$

   (b) (2 Points) What is the slope of this line, if defined?

$$\frac{4}{3}$$