Algebra 201-007-50 C1
Quiz 3
September 11, 2008

Name: SOLUTIONS

Student Number:

1. *(4 points)* Solve for x and give the solution graph and solution set (indicate which is which).
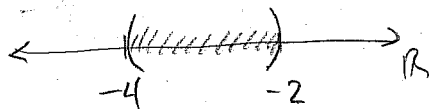
$$7 < 5 - x < 9$$

$$7 - 5 < 5 - x - 5 < 9 - 5$$

$$2 < -x < 4$$

$$\frac{2}{-1} > \frac{-x}{-1} > \frac{4}{-1}$$

$$-2 > x > -4$$

SOLUTION GRAPH:

SOLUTION SET:

$$(-4, -2)$$

1

2. *(6 points)* Find the x-intercept and y-intercept (indicate which is which) and use them to graph the following linear equation:

$$2x - 3y = 6$$
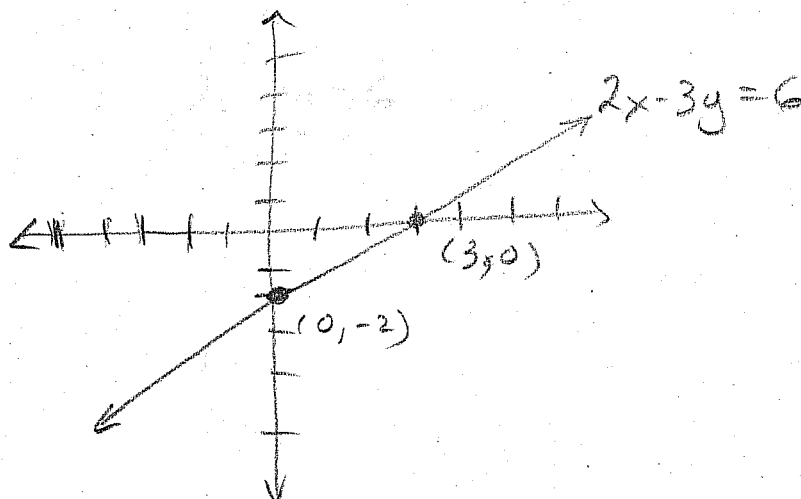
x-int: y=0

$2x - 3(0) = 6$

$2x = 6$

$x = 3$

∴ $(3, 0)$

y-int: x=0

$2(0) - 3y = 6$

$-3y = 6$

$y = -2$

∴ $(0, -2)$

$2x - 3y = 6$

$(3, 0)$

$(0, -2)$

3. *(2 points)* Find the slope of the line that passes through the points $(-1, -1)$ and $(2, 3)$.

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{3 - (-1)}{2 - (-1)} = \frac{4}{3}$$

2