Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

Teacher: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ CC Algebra

Cumulative Review #2.6

**Show work for all questions for full credit**

**& write your answers on the lines provided!!!**

(*If you feel no work is needed you must explain your reasoning.)*

1. What is the difference when 3x2 – x – 2 is subtracted from 6x2 + 4x – 5?

 A. 9x2 + 5x + 14

 B. 9x2 + 5x – 7

 C. 3x2 + 5x – 3

 D. 3x2 + 5x – 7

 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Which point lies on the boundary line of the graph of the inequality 3y + 4x < 12?

 A. (−3, 0)

 B. (8, 2)

 C. (0, 3)

 D. (3, 0)

 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. For the following graph, write a compound inequality that describes all of the numbers

 shown on the graph.

 3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Given f(x) = 4x - 3 and g(x) = x2 + 2x + 1, find f(2) + g(–2).

5. David has two jobs. He earns $8 per hour babysitting his neighbor’s children and he earns

 $11 per hour working at the coffee shop.

1. Write an inequality to represent the number of hours, x, babysitting and the number of hours, y, working at the coffee shop that David will need to work to earn a minimum of $200.

 5a. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. David worked 15 hours at the coffee shop. Use the inequality to find the number of full

hours he must babysit to reach his goal of $200.

 5b. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_