Econ 102 Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Summer 2014

Quiz #0

Please write all answers neatly and legibly.

1. Suppose that you are given the line X = 2Y + 10. You are also told that for every Y value the X value has now increased by 10 units. Write the equation for this new line. In your answer show all of your work.

2. Suppose that you are told that the point (Q, P) = (20, 0) sits on a straight line with Q measured along the x-axis. You are also told that on this straight line every time the y variable increases by 20 units, the x variable increases by 5 units. Write an equation in slope intercept form given this information. Show your work and explain the steps you used to find your answer.

3. Max’s scores in chemistry thus far are as follows:

First Midterm Score: 18 out of a possible 20 points

Second Midterm Score: 40 out of a possible 50 points

Third Midterm Score: 180 out of a possible 250 points

If all three midterms are treated as having equal weights, what is Max’s average in his chemistry class if the grades are calculated on a 200 point scale? Show how you found your answers and the steps you took to get your answer.

4. Suppose that Max (see problem #3) knows that to get an A in chemistry he must achieve an average of 160 points on a 200 point scale. He has taken the three midterms listed in problem #3 and now only has a final left to achieve his goal of an A in the class. If the final is on a 100 point scale but is weighted equivalently to each midterm (so each exam in the class is weighted as 25% of the final grade), what minimum score must Max achieve on this final to reach his goal? Remember that the final is on a 100 point scale. Show your work!

5. Suppose you are told that the two points (X, Y) = (20, 90) and (-10, -60) sit on line 1. You are told that the two points (X, Y) = (40, 85) and (-10, -15) sit on line 2. Find the (X, Y) where line 1 and line 2 intersect one another given this information. Show your work.