Economics 101 Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Summer 2014

Quiz #0

Please write your answers neatly and legibly.

1. (Checking your algebra and your recall of the rules of fractions) Suppose you are given two lines:

Y = (1/3)X + 9

Y = 3 – (1/6)X

Given these two lines find the point of intersection (X, Y) for these two lines. Show all your work in finding the solution.

1. (Checking your algebra and your recall of slope-intercept form) Suppose you are given the following equation:

X = 2Y – 4

where X is the variable measured on the horizontal axis and Y is the variable measured on the vertical axis. Suppose that something happens so that for every X value in the original equation the Y value is now 10 units larger. What is the equation for this new line? Show all your work in finding this new equation.

1. (Checking your algebra and your recall of slope-intercept form) Suppose you know that the points (10, 4) and (5, 2) sit on the same straight line. Write an equation for this line in slope intercept form given this information. Show all your work in finding this equation.
2. (Graphical analysis with some algebra) Suppose that you know the points (X, Y) = (8, 16) and (30, 5) sit on the same straight line. Determine whether the following points sit on this line, sit below the line, or sit above the line. Show your work in the large space below and then on the blank state whether the point sits on the line, below the line, or above the line.
   1. (X, Y) = (20, 14) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. (X, Y) = (6, 17) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. (X, Y) = (35, 3) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   4. (X, Y) = (38, 2) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. (Checking your facility with percentages, decimals, and multiplication) Susie deposits $200 in a savings account at the local credit union. During the first year Susie earns 6% on this savings account. This interest is paid to Susie at the end of the year. Susie keeps the original amount of her deposit plus this savings in her account and during the second year she earns 5% on this account. At the end of the second year what is the value of Susie’s savings account. Show how you found your answer.