Economics 102   Name _____
Summer 2015
Quiz #0
Monday, June 22, 2015

Please write your answers neatly and legibly.

1. (1 point) Suppose you are given two equations:
        $Y = 100 - 3X$
        $Y = 20 + 2X$
Find where these two lines intersect and provide the coordinates for this point (X, Y). For full credit show your work.

2. (1 point) This is a multiple choice question (circle the correct answer): Suppose you are given the following information about the price of bicycles in the economy of Supplia.

Year	Price of A Bicycle
2013	$200
2014	$220
2015	$240

Which of the following tables is most accurate given the above information?

a.

Year	Percentage Change From Previous Year
2013	----
2014	20%
2015	40%

c.

Year	Percentage Change From Previous Year
2013	----
2014	10%
2015	Less than 10%

b.

Year	Percentage Change From Previous Year
2013	----
2014	10%
2015	10%

d.

Year	Percentage Change From Previous Year
2013	----
2014	10%
2015	More than 10%

3. (1 point) You are told that when interest rates are 10% that the demand for loans is equal to $10,000. And, when interest rates are 5%, the demand for loans is equal to $20,000. Assume that the demand for loans is linear. Given this information, at what interest rate does the demand for loans equal $0? For full credit show or describe how you found your answer.

4. (1 point) Suppose you are given the line:
$$Y = 10 - 2X$$
You are then told that something happened so that for every Y value the X value has now increased by 30. What is the equation for this new line? For full credit show how you found your answer.

5. (3 points) Suppose you are told that the points (X, Y) = (10, 10) and (40, 5) sit on a straight line. Given this information, write an equation for this line in slope-intercept form. For full credit show how you found your answer. [Note: it is okay to leave any fraction as an improper fraction in this question.] After you write the equation, provide proof that both of the given points sits on this line!

6. (3 points) Professor Kelly is amazed every semester to see that some students decide not to do some of their assignments. This summer your grade is based upon doing five homeworks that are each worth 2 points on a 100 point scale, four quizzes that are each worth 2.5 points on a 100 points scale, 2 midterms that are each worth 25 points on a 100 point scale, and a final that is worth 30 points on a 100 point scale. For this question we will consider three hypothetical students that take this summer school class.

Jake takes the class and does all assignments: here are his results.
      Scores on Homeworks: 2; 2; 2; 2; 2
      Scores on Quizzes: 2; 2; 1; 1
      Score on First Midterm: 80
      Score on Second Midterm: 80
      Score on Final: 80
Mary takes the class and does not do all the assignments: here are her results.
      Scores on Homeworks: 0; 0; 0; 0; 0
      Scores on Quizzes: 2; 2; 1; 1
      Score on First Midterm: 80
      Score on Second Midterm: 80
      Score on Final: 80
Bethany takes the class and does not do all the assignments: here are her results.
      Scores on Homeworks: 0; 0; 0; 0; 0
      Scores on Quizzes: 0; 0; 0; 0
      Score on First Midterm: 80
      Score on Second Midterm: 80
      Score on Final: 80

Given the above information, calculate the final weighted score for each of these individuals. For full credit show all of your work in an orderly and easy to follow manner. Make sure the grader knows whose score you are computing. Once you have done the calculation, answer the following question:

Is there much of a penalty for not doing the assignments in Professor Kelly's class? Explain your answer fully using evidence and clear expression.