CS 1316, Summer Quiz 1

1. Who is your grading TA? [1 pt]

2. Which of the following lines of Java code are POSSIBLY valid? Circle the correct choices. [5 pts]
   (a) double x;  
   (b) real x = 0.0;  
   (c) double x = 9.0;  
   (d) x = 9.0;  
   (e) double real = new Color(255, 255, 255);

3. The following function goes through all the numbers from 1 to 10, multiplying them together and returns the product (i.e. the factorial 10!). Complete the first line of the for loop so that the function works correctly. [6 pts]

   ```java
   int factorial10() {
   int product = 1;
   for (_____________ ; ________________; _______________)
       product = product * i;
   return product;
   }
   ```

4. The following method in the class Picture decreases the blue in the picture (and therefore makes it look more yellow). However, there are several errors in the code. Mark the code below to correct the errors. [6 pts]

   ```java
   def void decreaseBlue():
       Pixel[] pixels = getPixels(this);
       width = this.getWidth();
       int area == width * this.getHeight();
       int pixNum = 0;
       while (pixNum <= area):
           Pixel pix = pixels.pixNum;
           blueValue = pix.getBlue();
           pix.setBlue((int)(blueValue * 0.5));
           pixNum++ = pixNum + 1
   ```

5. Write Java code that draws a rectangle that is twice as long as it is high, where height is given to be 100 pixels. [7 pts]

   ```java
   public class TurtleSquares {
       public static void main(String[] args) {
           // Write your code below
   ```