Some more practice with objects and classes, especially Random, Math, Point, and String.

1. **Fields**
   a. What are 3 fields we have seen so far? (Hint: 1 in the Math class, 2 in the Point class)
   
   b. What are the values of the fields in `p1` and `p2` after the following code?
      ```java
      Point p1 = new Point(2, 3);
      Point p2 = p1;
      p2.setLocation(3, 4);
      ```
   
   c. What are the values of the fields of `p` after the following code?
      ```java
      Point p = null;
      ```

2. **Programming with fields and Methods**
   a. Name at least 1 method from each of these classes: Random, Math, Point, and String. For each method, indicate the data type of the value it returns, and the data type of the arguments it takes (if any).
   
   b. Write a statement to initialize an object of type Random, Math, Point, and String.
   
   c. Write a statement using a method from the class Random, Math, Point, and String.
   
   d. How are the commands using Math methods and fields different from the other 3 classes?
   
   e. Read a String from the keyboard. Write a loop to count how many letter T’s appear in the String. (Use the `charAt()` and `length()` methods. If you want, you can use the `indexOf()` method as well, but it’s not necessary.)
   
   f. What is the value of the following:
      
      ```java
      - “hello”.charAt(4)
      - “hello”.substring(2, 4)
      - “hello”.indexOf(“ll”)
      - (new Point(1, 3)).setLocation(1, 5)
      - (new Point(1, 3)).translate(1, 5)
      - (new Point(1, 3)).distance(new Point(0, 0))
      - (new Random()).nextInt(10)
      - (new Math()).sin(Math.PI)
      - Math.sqrt(4)
      - Math.pow(2, 3)
      ```