Question 1 of 1 Method 2 1 pt

Suppose that the following test fails in the buggy version:

```
public void testSSENonNegative() {
 // Data points used for regression
 double[] x = \{ 1.107178495E2, 1.107264895E2, 1.107351295E2 \};
 double[] y = { 8915.102, 8919.302, 8923.502 };
 // With SimpleRegression, we perform a linear regression.
 SimpleRegression reg = new SimpleRegression();
 // We find a linear regression model that fits the data best.
 for (int i = 0; i < x.length; i++) {
     reg.addData(x[i], y[i]);
 }
  // The following assertion fails in the buggy version.
  assertTrue(reg.getSumSquaredErrors() >= 0.0);
}
```

In the above test, getSumSquaredErrors() returns the sum of squared errors (SSE) of the obtained linear regression model. Note that SSE can be calculated using the following formula:

$$\sum_{i=0}^{n-1} (y[i] - f(x[i]))^2$$

}

In the above formula, x and y correspond to the array x and y of the failing test testSSENonNegative. For example, x[0] is 1.107178495E2 and y[0] is 8915.102. Meanwhile, notation f refers to the obtained regression model.

SSE should always be non-negative, and the current buggy implementation fails to satisfy this condition for the given test. Meanwhile, when reg.getSumSquaredErrors() returns a positive value as expected, the current implementation produces the correct SSE value.

Now suppose that we have a patch for this bug, and we are going to use the following test to validate this patch. Complete this test by filling in the underlined blank.

```
public void testSSENonNegative(double d1, double d2, double d3,
 double d4, double d5, double d6) {
 // Data points used for regression
 double[] x = \{ d1, d2, d3 \};
 double[] y = \{ d4, d5, d6 \};
 SimpleRegression reg = new SimpleRegression();
 for (int i = 0; i < x.length; i++) {
     reg.addData(x[i], y[i]);
 final double sse = reg.getSumSquaredErrors();
 // Fill in the following blank with a boolean expression.
 // Note that under the given condition, the original version is assumed to
 // run correctly, and we expect that the same output will be produced
 // from the patched version.
 assertSameOutIf(
                                         , /* output */ sse);
```