

```

1 package Mastery;
2
3 import java.util.Scanner;
4
5 public class MathTutor {
6     public static void main(String[] args) {
7
8         Scanner userInput = new Scanner(System.in);
9         Random rand = new Random();
10
11         //Variable initialization
12         double random_number_1;
13         double random_number_2;
14         double user_answer;
15         double computer_answer = 0;
16         int math_method_int;
17         String math_method = null;
18
19         //Random math problem generation
20         random_number_1 = Math.round(rand.nextDouble(10 - 1 + 1) + 1);
21         random_number_2 = Math.round(rand.nextDouble(10 - 1 + 1) + 1);
22         math_method_int = rand.nextInt(4 - 1 + 1) + 1;
23         if (math_method_int == 1) {
24             math_method = "+";
25         }
26         if (math_method_int == 2) {
27             math_method = "-";
28         }
29         if (math_method_int == 3) {
30             math_method = "*";
31         }
32         if (math_method_int == 4) {
33             math_method = "/";
34         }
35
36         //User input
37         System.out.print("What is the answer to: " + random_number_1 + math_method + random_number_2 + "? (round to nearest integer) ");
38         user_answer = userInput.nextDouble();
39
40         //logic and calculations
41         if (math_method_int == 1) {
42             computer_answer = random_number_1 + random_number_2;
43         }
44         if (math_method_int == 2) {
45             computer_answer = random_number_1 - random_number_2;
46         }
47         if (math_method_int == 3) {
48             computer_answer = random_number_1 * random_number_2;
49         }
50         if (math_method_int == 4) {
51             computer_answer = Math.round(random_number_1 / random_number_2);
52         }
53         if (user_answer == computer_answer) {
54             System.out.print("Your answer was correct. Good job!");
55         } else {
56             System.out.print("Your answer was incorrect. The correct answer was: " + computer_answer);
57         }
58     }
59 }

```

No runtime errors occurred for this code.