

Show the output of the following code segments. If an error occurs, print “error” as your answer & explain. **Draw diagrams or show scratchwork in the margins or on separate paper for full-credit.**

1.
Bug flik = new Bug(Color.RED, 90, 1, 3); // color, direction, row, column
Bug atta = flik;
flik.setDirection(180);
System.out.println(atta.getDirection()); // output: _____

2.
Bug flik = new Bug(Color.RED, 90, 1, 3);
Bug atta = flik;
atta = null;
System.out.print(flik.getColor());
atta = new Bug(Color.BLUE, 270, 3, 4);
flik = atta;
atta = null;
System.out.println(" " + flik.getColor()); // full output: _____

3.
Bug flik = new Bug(); // default values: RED, 0, 0, 0
Bug atta = flik;
flik.setColor(Color.BLUE);
flik = null;
Bug atta = new Bug(Color.RED, 0, 0, 0);
System.out.println(atta.getColor()); // output: _____

4.
String food1 = "green eggs"; // String objects are immutable
String food2 = "ham";
food1 = food2;
food2 = "turkey";
System.out.println(food1 + " " + food2); // output: _____

5.
String food1 = "pumpernickel";
String food2 = food1;
food1 = food1.substring(5);
System.out.println(food1 + " " + food2); // output: _____

6.
int num1 = 10; // int is a primitive data type
int num2 = num1;
num1 = 20;
System.out.println(num1 + " " + num2); // output: _____

7.
double x1 = 3.14; // double is a primitive data type
double x2 = 0;
x1 = null;
System.out.println(x1 + " " + x2); // output: _____