1. Answer the following questions given the class below.

```java
public class Quiz05 {
    public static int x = 13;
    public static int method1(int x, int y) {
        int a = x + y;
        System.out.println(a);
        return a + x;
    }

    public static void main(String[] args) {
        System.out.println(x);
        int x = 23;
        System.out.println(x);
        x = x + Quiz05.x;
        x = method1(Quiz05.x, x);
        System.out.println(x);
    }
}
```

(a) (1 point) How many methods/functions are there in the above class and what are their names?

**Solution:** 2: method1 and main

(b) (1 point) How many parameter variables are there in the above class and what are their names?

**Solution:** 3: x and y (in method1) and args (in main method)

(c) (1 point) How many local variables are there in the above class and what are their names?

**Solution:** 2: a (in method1) and x (in main)

(d) (1 point) How many class variables are there in the above class and what are their names?

**Solution:** 1: x

(e) (3 points) What is the output of the above program when it is executed?

**Solution:** 13
23
49
62
2. Consider the following method:

   ```java
   public static void puzzle(String confusing, String fun, String hard) {
       System.out.println("Many days I find CS170 " + hard + ". Some days it’s " + fun + ". Others days it’s just " + confusing);
   }
   }
   ``

   (a) (3 points) You are given the following code (in a separate method). What is the output of the code?
   ```java
   String fun = "confusing";
   String confusing = "hard";
   String hard = "fun";
   puzzle(hard, confusing, fun);
   ```

   **Solution:** Many days I find CS170 confusing. Some days it’s hard. Other days it’s just fun.

   (b) (2 points) Using the variables and associated values in part a, write a function call which would generate the output:
   “Many days I find CS170 fun. Some days it’s confusing. Other days it’s just hard.”

   **Solution:** puzzle(confusing, fun, hard)

3. (3 points) You are given the following method header/signature:

   ```java
   public static void method2(int x, double y)
   ```

   and the following variable definitions:

   ```java
   double a = 3.04;
   int b = 3;
   ```

   Select **ALL** of the following statements which are valid (legal) ways to invoke the function `method2` and would not cause a syntax (compilation) error.

   ```java
   A. method2(b, b);
   B. b = method2(b, a);
   C. b = method2(b, b);
   D. method2(b);
   E. method2(a, b);
   F. method2(b, a);
   G. method2("b", "a");
   H. method2(1, 3.24);
   I. method2("b", "a");
   ```