1. Find the output for each of the following problems:

    a. 10/2 + 4
    b. 10/4 + 5
    c. 15/2.0 – 1
    d. (double)(12/2 + 1)
    e. (int)(10/4.0 + 4)

    f. (int)(5/2 + 9/2)
    g. 11/4 + 5
    h. (double)24/5 – 1
    i. 20/(double)8
    j. (int)(3.8) + 5/2

2. Which of the following lines of code would create an error?

    I.   double c = 5;
    II. int a=4.0;
    III. String m = "8";

    A. I only.
    B. II only.
    C. III only.
    D. I and II
    E. I, II, and III

3. When you name things in JAVA (variables, methods, classes, etc.) you are making what is called an identifier. Which of the following describes an identifier?

    A. Identifiers may not begin with a number.
    B. Identifiers typically start with lowercase letters and use uppercase letters to signify a new word.
    C. Identifiers are case sensitive.
    D. Identifiers may only use letters, numbers, and the underscore symbol.
    E. All of the above.

4. Which of the following are true of final variables?

    I.   Final variables are typically named using all capital letters.
    II. Since they are final, final variables can never be accessed later in a class.
    III. Final variable values remain constant and may never be changed.

    A. I only.
    B. I and II.
    C. III only.
    D. I and III.
    E. I, II, and III.

5. What is the exact output for the following code? (be aware of how it is formatted!)

    int a=7, b=2;
    System.out.print(a);
    a = b++;
    System.out.print(++b);
    System.out.println(b(++a));*
    System.out.print(a+b);

6. What is the exact output for the following code?

```
int i=12, k=1;
int p = --i + k--;
System.out.print(i+k+p);
```

7. What is the exact output for the following code?

```
int a=5, b=8, c=12;
String d="dog", e="eel";
System.out.println("Good"+e+".\n"+d+c);
System.out.println(b+c-a);
System.out.println("Why \"me\" says  " + d +"gy! \\");
```

8. Which of the following is an example of a valid comment in JAVA?

    I.   * This is a comment *
    II. // This is a comment
    III. /* This is a comment */

A. I only
B. II only
C. I and III
D. III only
E. II and III

9. Which would NOT properly find the correct answer to the mathematics problem that is presented?

A. double theAnswer = 7/4;
B. double theAnswer= 7.0/4;
C. double theAnswer= 7/(double)4;
D. double theAnswer= (double)7 / 4;
E. double theAnswer= 7.0/4.0;

10. What is the output for the following JAVA code?

```
int a=1, b=2, c=3, d=4;
int e= (c/b)+(double)a;
System.out.print(e);
```

11. What is the output for the following JAVA code?

```
int a=1, b=2, c=3, d=4;
double  m = (int)(8.4/b)*c;
System.out.print(m);
```