Question 1: What is printed by the following Java statements? (5 points)

```java
int x = 4 * 5 % 4 - 2 - 3;
System.out.println("x=\""+x);
int n = 5;
++n; System.out.println("n=\""+n);
--n; System.out.println("n=\""+n);
```

Question 2: Modify only one of the Java statements below so that this code will compile. (2 points)

```java
float f = 2.3;
double d = 3.2f;
```

Question 3: What is printed by the following Java statement? (4 points)

```java
System.out.println("Hello"+"world
Goodbye");
```

Question 4: Write a single Java statement that will set a boolean variable danger to true, if speed is greater than 65 and visibility is less than 50; or false, otherwise. (5 points)

```java
```

Question 5: Write a single Java statement that defines a named constant for the number of days in one week. (3 points)
Question 6 ................................................................. (4 points)
What is printed by the following Java statements?

```java
int count = 0;
while (count<5) {
    System.out.println(count);
    ++count;
}
```

Question 7 ................................................................. (4 points)
Rewrite (simplify) the code fragment in the previous question using a `for` loop.

Question 8 ................................................................. (7 points)
What is printed by the following program fragment?

```java
int i;
for (i=0; i<=4; ++i)
    System.out.print(i);
for (i=0; i>4; ++i)
    System.out.print(i);
for (i=4; i>0; --i)
    System.out.print(i);
for (i=4; i>0; --i); // a programming error?
    System.out.print(i);
```

Question 9 ................................................................. (6 points)
Complete the following Java method.

```java
/**
 * Computes and returns the sum 1*1 + 2*2 + 3*3 + ... + n*n.
 * @param n a positive integer.
 * @return the sum.
 */
public static int sumOfSquares(int n) {
```
Question 10

Complete the following class, which models a pump at a gas station:

```java
public class GasPump {

    // Rate at which fuel can be pumped.
    public static final double GALLONS_PER_SECOND = 0.1;

    // Constructs a new gas pump with specified parameters.
    GasPump(double gallonsAvailable, double dollarsPerGallon) {
    }

    // Resets to zero the cost and number of gallons pumped.
    public void reset() {
    }

    // Pumps gas for the specified number of seconds or until out of gas.
    public void pump(double seconds) {
    }

    // Determines whether fuel is available at this pump.
    public boolean hasFuel() {
    }

    // Prints the number of gallons pumped and the cost in dollars.
    public void printReceipt() {
    }

    // Declare all required private fields here.
}
```