Signature _____ **CSE 11 Quiz 2 Fall 2010** **Name** _____

cs11f ____ **Student ID** _____

This quiz is to be taken **by yourself** with closed books, closed notes, no calculators.

(Partial) Operator Precedence Table

Operators	Associativity
* / %	left to right
+ -	left to right
< <= > >=	left to right
== !=	left to right
&&	left to right
||	left to right
=	right to left

1) What are the values of `x` and `y` (left) and `a` and `b` (right) after the following code segments are executed?

```
int x = 2, y = 4;

if ( x++ >= 3 || --y >= 3 )
  x = x++ + --y;
else
  x = ++x + y--;
```

x =
y =

```
int a = 2, b = 4;

if ( a++ >= 3 && --b >= 3 )
  a = a++ + --b;
else
  a = ++a + b--;
```

a =
b =

2) What is the equivalent Java expression for the following expression such that no `!` operators are used?

```
!( a > 5 && b != -9 )
```

_____

3) Assume we have a Java source file named Program.java and it uses at least one class in the objectdraw library.

Write the full Unix command to compile this Java program.

_____

This command will produce a file named:

_____

Write the full Unix command to run this as a Java application.

_____

Assume we have correctly written a Program.html file. Write the full Unix command to run the above program as an applet.

_____

4) Assume a program had the following declarations:

```
Location loc1 = new Location( 42, 420 );
Location loc2 = loc1;
Location loc3 = new Location( loc2 );
```

What results would be produced by evaluating the following expressions?

```
( loc1 == loc2 )  _____________      loc1.equals( loc3 )                  _____________

( loc2 == loc3 )  _____________      loc3.equals( new Location( loc2 ) ) _____________
```

5) What output is produced with the following code fragment? Assume `method1()` is invoked as

```
Quiz2 q2 = new Quiz2();
q2.method1( 17 );
```

```
public class Quiz2
{
  private int a;                          // Line 3

  public void method1( int x )
  {
    int a;                                // Line 7
    int b = x;

    a = b % 5;
    this.a = b / 3;

    System.out.println( "a = " + a );
    System.out.println( "b = " + b );
    System.out.println( "this.a = " + this.a );
    System.out.println( "method2() result = " + method2( x ) );
    System.out.println( "this.a = " + this.a );
  }

  private int method2( int x )
  {
    int a = x;
    int b = this.a;

    b = b * 2;

    System.out.println( "a = " + a );
    System.out.println( "b = " + b );
    System.out.println( "this.a = " + this.a );

    this.a = b + 2;

    return a + 2;
  }
}
```

Output:

```
a = _____________
b = _____________
this.a = _____________
a = _____________
b = _____________
this.a = _____________
method2() result = _____________
this.a = _____________
```

What is the initial value of `a` on Line 3? _____

What is the initial value of `a` on Line 7? _____