Signature _____ **CSE 11** **Name** _____

Quiz 1

cs11f ____ **Fall 2013** **Student ID** _____

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

(Partial) Operator Precedence Table

Operators				Associativity
!	++	-- (pre & post inc/dec)		right to left
*	/	%		left to right
+	-			left to right
<	<=	>	>=	left to right
==	!=			left to right
&&				left to right
||				left to right
=				right to left

Using the operator precedence table above, evaluate each expression and state what gets printed. Remember short-circuit evaluation with `&&` and `||`.

```
int a = 2;
int b = -1;
int c = 7;
boolean exp1 = a + b * c < a + c * b;      _________      (value of exp1)

boolean exp2 = !(c + a >= b);              _________      (value of exp2)

boolean exp3 = b - a != c;                 _________      (value of exp3)

boolean z = exp1 || exp2 && !exp3;
System.out.println( "z = " + z );          ____________________

z = exp1 && exp2 || exp3;
System.out.println( "z = " + z );          ____________________

int d = b-- + a++ % 4 * ++c * 2;
System.out.println( "a = " + a );          ____________________

System.out.println( "b = " + b );          ____________________

System.out.println( "c = " + c );          ____________________

System.out.println( "d = " + d );          ____________________
```

Which of the following <u>are</u> valid Java identifiers? (Circle your answer(s).)

```
CSE_11          sEvEnTeEn       1stJavaClass          My-First-Java-Class

boolean         Float           My1stJavaClass        CSE11Is#1
```

In general, you should define instance variables to be _____ (write correct letter here)

A. final
B. public
C. private
D. static

(Continued on other side)

What gets printed with each of the following statements?

```
int a = 1;
int b = 3;
int c = 5;

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

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

System.out.println( a + (b + c) + " = " + (a + b) + c ); _____
```

Given the following code segments, what gets printed?

```
int x = 5, y = 5, z = 5;

if ( x != 5 )
{
    if ( y <= 7 )
        z = z + 4;
}
else
{
    z = z + 2;
}

System.out.println( z ); _____
```

```
int x = 5, y = 5, z = 5;

if ( x != 5 )
    if ( y <= 7 )
        z = z + 4;
else
    z = z + 2;

System.out.println( z ); _____
```

Note - No curly braces.

Given the following nested if-else statements, fill in the blanks of the equivalent logic using cascading if-else-if statements using only the boolean variables `sunny` and `rich` and negation and logical AND or logical OR operators. Note the order of what gets printed. This is straight from the textbook.

```
boolean sunny = …;
boolean rich = …;

if ( sunny )
{
  if ( rich )
  {
    System.out.println( "Outdoor Concert" );
  }
  else
  {
    System.out.println( "Ultimate Frisbee" );
  }
}
else
{
  if ( rich )
  {
    System.out.println( "Indoor Concert" );
  }
  else
  {
    System.out.println( "Watch TV" );
  }
}
```

```
if ( ____________________________________ )
{
  System.out.println( "Outdoor Concert" );
}
else if ( ____________________________________ )
{
  System.out.println( "Indoor Concert" );
}
else if ( ____________________________________ )
{
  System.out.println( "Ultimate Frisbee" );
}
else  // !sunny && !rich
{
  System.out.println( "Watch TV" );
}
```