This quiz is to be taken by yourself with closed books, closed notes, and no electronic devices. We’ll hold a review session on Wednesday, January 20 @ 5:00 in CENTR 212. Quiz will be during last 20 minutes of lecture on January 22. You must attend the class that you’re enrolled in.

(Partial) Operator Precedence Table

<table>
<thead>
<tr>
<th>Operators</th>
<th>Associativity</th>
</tr>
</thead>
<tbody>
<tr>
<td>! ++ -- (pre &amp; post inc/dec)</td>
<td>right to left</td>
</tr>
<tr>
<td>* / %</td>
<td>left to right</td>
</tr>
<tr>
<td>+ -</td>
<td>left to right</td>
</tr>
<tr>
<td>&lt; &lt;= &gt; &gt;=</td>
<td>left to right</td>
</tr>
<tr>
<td>== !=</td>
<td>left to right</td>
</tr>
<tr>
<td>&amp;&amp;</td>
<td>left to right</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>=</td>
<td>right to left</td>
</tr>
</tbody>
</table>

1. Evaluate each expression below and state what gets printed.
   int a = 2;
   int b = 4;
   int c = -1;
   boolean exp1 = a + b * c < a + c * b; ________ (value of exp1)
   boolean exp2 = (a + b) / c > b; ________ (value of exp2)
   a = b;
   b++;
   System.out.println("a = " + a); ________ (what gets printed)
   System.out.println("b = " + b); ________ (what gets printed)

2. Which of the following are valid Java identifiers? (Circle your answers)
   <YOURNAME> 3rdInning game_changer mass-confusion
double Float big$$$ CSE11

3. The naming convention for a final variable is (circle correct letter)
   A. start with upper case, use lowercase to denote new word
   B. Start with lower case, user uppercase to denote new word
   C. All lowercase with underscores
   D. all uppercase with underscores
4. What gets printed for each code segment?

```java
int x = 3, y = 4, z = 5;
if ( x == 3 ) {
    if ( y < 4 )
        z = z + 4;
} else {
    z = z + 2;
}
System.out.println( z );
```

What gets printed:_________________                   What gets printed:_________________
(note: no curly braces)

5. What gets printed with each of the following statements?

```java
int a = 2;
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 );
```

6) Give an example value for a and b that result in the following code printing "C"?

```java
int a = ______ ;
int b = ______ ;
if ( (a > 0) || (b > 0) ) {
    if ( a > b ) {
        System.out.println( "A" );
    } else {
        System.out.println( "B" );
    }
} else if ( (a < 0) || (b < 0) ) {
    System.out.println( "C" );
} else {
    System.out.println( "D" );
}
```
7. What is the output of the following code:

```java
for (int i = 1; i < 3; ++i) {
    for (int j = 10; j >= 0; j -= 5) {
        System.out.println(i * j);
    }
}
int z = 40;
while (z > 25) {
    z--;
    if (z % 10 == 0) {
        break;
    }
    if (z % 2 == 1) {
        continue;
    }
    System.out.println(z);
}
```

Output:

```
8.
9.
```

8. What is the output of the following code:

```java
int z = 40;
while (z > 25) {
    z--;
    if (z % 10 == 0) {
        break;
    }
    if (z % 2 == 1) {
        continue;
    }
    System.out.println(z);
}
```

Output:

```
9.
```

9. What kind of loop will always be executed at least once? _______________________

10. Unix Commands

a) What is the Unix terminal command to make a directory called foobar?

b) What is the Unix terminal command copy a file named Sky.java that is located two directories above the current directory into the current directory?
c) What is the Unix terminal command to list all files in the current directory?

______________________________________________________________________________

d) What is the Unix terminal command to display the path of the current directory?

______________________________________________________________________________

11. Below is code similar to a section in your Zybooks textbook.

```java
import java.util.Scanner;

public class DogYears {
    public static void main(String[] args) {
        Scanner scnr = new Scanner(System.in);
        int dogAgeYears = 0;

        System.out.print("Enter dog's age (in years): ");
        dogAgeYears = scnr.nextInt();

        switch (dogAgeYears) {
            case 0:
                System.out.println("0..14 human years.");
                break;
            case 1:
                System.out.println("15 human years.");
                break;
            case 2:
                System.out.println("24 human years.");
                break;
            case 3:
                System.out.println("28 human years.");
                break;
            default:
                System.out.println("Unknown");
                break;
        }
    }
}
```

a) What gets printed when the user enters 1?

Output:

```

```

b) What gets printed when the user enters 3?

Output:

```

```