

**SVKS Java Class - Concept Review**

Student Name:

**Week 1: Variables and IO**

1. Which type of information does each variable type hold?
   1. Integer
   2. Double
   3. Boolean
2. What does each of these operators do?
   1. -
   2. +
   3. / (integer division)
   4. \*
   5. %
3. double x = 39;

double y = 6;

double z = x/y;

What is the value of z? (Hint: 6 or 6.5?)

1. Write an example of variable initialization, declaration, and then both in one line.

**Week 2: Boolean and Boolean Tests**

1. What will this code output?

if(false){

System.out.println("The if statement ran!");

}

1. “The if statement ran!”
2. “The if statement failed to run!”
3. Nothing
4. Error Message
5. Look at the following code. Which of the options would go

into ??? and make the if statement run?

if(???){

System.out.println("It worked!");

}

1. 5 <= 3
2. 3 = 3
3. 4 >= 3
4. It will run no matter what
5. Look at the following code. Which of the options would go into ??? and make the program print “Option 3”?

if(3 > 4){

System.out.println("Option 1");

} else if (???) {

System.out.println("Option 2");

} else {

System.out.println("Option 3");

}

1. 4 != 3
2. true
3. 10 <= 1
4. It can never run

**Week 3: for and while loop**

1. Which of the following choices causes infinite loop
   1. int x = 0;

while(x <= 5){

x++;

}

* 1. int i = 0;

while(i <= 100){

L++;

}

* 1. boolean repeat = true;

while(repeat){

repeat = false;

}

* 1. int x = 10;

while(x >=0){

x--;

}

1. Which of the following should go in the ???

for(???; x < 10; x++){

System.out.println(x);

}

* 1. int i = 0;
  2. x > 10;
  3. x--;
  4. int x = 100;
  5. int x = 0;

1. How many times will “x” print?

for(int i = 0; i <= 10; i++){  
 System.out.println(“x”);

}

* 1. 8
  2. 0
  3. 9
  4. 10
  5. 11

**Week 4: Arrays**

|  |
| --- |
| * + - 1. Which of the following choices is the correct syntax for declaring/initializing an array of ten integers? |
| 1. int[] a = new int[10]; 2. int a[10]; 3. []int a = [10]int; 4. int a[10] = new int[10]; 5. int[10] a = new int[10]; |

2. What goes in the blank?

int[] numbers = new int**[??]**;

1. Nothing
2. Index of an array called numbers
3. Length of an array called numbers
4. 0

3. Draw an array graph(Fill in the blanks in below)

double[] results = new double [5];

results[2] = 3.4; results[4] = -0.5;

\*if there is nothing, then the elements would be 0.0 \*

Answer :[ 0.0 , , , , ]

4. Match

**Element. .**object that stores many values of the same type

**Index. .**one value in an array.

**Array. .**a 0-based integer to access an element from an array