

Review Questions for 120 Exam #1:

Name the two theoretical machines that Charles Babbage developed.

Give the code to declare an integer variable called x and then assign it the number 10.

Give the code to print out "Hello World" to the screen. I just want the one line that actually prints the string here.

Name three primitive types.

What is the difference between float and double?

What is the difference between operand and operator?

Give an example of a binary operator and a unary operator.

Give the code for the method Add2Ints which will add two integers, x and y, together and print that total out. You may simply declare and assign x and y arbitrary integers. Make sure you declare all variables needed and add proper comments.

Who was Augusta Ada Byron, the Lady Lovelace, and why was she important?

Give a detailed algorithm for getting a glass of water.

What is an algorithm?

Declare a named double constant called PI that has the value 3.14159.

What does this code snippet output:

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

System.out.println(c);
```

What are these three symbols: !, &&, ||

Give the truth table for two variables x and y for logical AND.

What are two ways to add 1 to a value?

What do == and != mean?

Why do we use constants?

What does this code snippet output:

```
int x = 7;
int y = 9;
int z = 3;
int a = x-y*z;
System.out.println(a);
```

What is the difference between an object and a class?

Give a full description of a class Chair. Be sure to include properties, behaviors and questions.

What is wrong with this code:

```
public class MyProgram{
    public void calcCircle(){
        private static final double PI = 3.1459;
        double r = 4.56;
        double c = 2 * PI * r
        System.out.println("c = " c);
    }
}
```