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

The claim that the number of transistors on a chip would double every 18 months at the same price is known as (Circle your answer.)

- Perlis's Law
- Turing's Law
- De Morgan's Law
- Amdahl's Law
- von Neuman's Law
- Moore's Law

What are the digits in the binary number system? (List all the digits used in the binary number system.)

How many bits are in a byte? ______

What does the statement `System.out.println( "The answer is: " + 3 + 2 );` print?

What does the statement `System.out.println( 2 < 3 );` print?

What does `int x = 1 / 3; System.out.println( x );` print?

What is the full name of the file that this Java code must be saved as? ______________________________________

```java
public class Boogie { /* Body of the class here. */ }
```

Which is the correct way to make a turtle (named maria) turn left? (Circle the correct answer.)

A) `maria.turn( 90 );`
B) `maria.turn( -90 );`
C) `maria.turn( 180 );`
D) `maria.turn( -180 );`

What is stored in the memory location allocated for the variable `x` for the following:

```java
int x = -99;
```

A) `x`
B) a reference (or address in memory) to where the value -99 is stored
C) the value -99
D) `int`
What is printed by the following code?

```java
int foo = 42;
int bar = 37;
boolean foobar = ( foo == bar );
System.out.println( foobar );
foo = bar;
System.out.println( foobar );
System.out.println( foo == bar );
```

In the code for `drawSquare( int size )` discussed in class, we used lines like

```java
this.forward( size );
```

If `drawSquare()` is invoked as

```java
koko.drawSquare( 42 );
```

what does this refer to? (Circle the correct answer.)

A) this square  
B) koko  
C) this size  
D) this shape  

What is stored in the memory location allocated for the variable `x` for the following:

```java
String x = "-99";
```

A) x  
B) a reference (or address in memory) to where the string "-99" is stored  
C) the value -99  
D) int  

Fill in the blanks to complete the code to draw an L shape (do not worry about where it is drawing). Assume the turtle is pointing up when the method is called.

```java
public void drawL( int size )
{
    this.turn( ______________

    this.____________________ ( size );

    this._____________________ ();  // no parameter to this method

    this._____________________ ( ____________ );
}
```

Fill in the blank so the code will print out 0.3333333

```java
System.out.println( (____________) 1 / 3 );
```