Unit 07 and Chapter 6: Programming Languages

Answer the following questions using the textbook, your individual notes, and the Internet.

1. What is the difference between an *assembler*, a *compiler*, and an *interpreter*?

2. What is the difference between *declarative* statements, *imperative* statements, and *comments*? Why do programming languages need all three?

3. Draw parentheses to show operator precedence. What is the value of number?

```
number  =  1  +  2  *  3  -  4  /  5  +  6  *  7  -  8  /  9
```

4. Rewrite the following instructions in Python using a single if-else statement.

```
      if (X = 5) goto 50
      goto 60
 50   print the value of Z
      goto 100
 60   print the value of Y
100   . . .
```

5. Why is the "goto" statement no longer popular in high-level programming languages?