1. Write Java syntax for a for-loop that shows the first 12 powers of 2 starting with $2^1$. Do not use `Math.pow()` – this is typically for doubles, not integers, and is slow.

   ```java
   int pow = 2, sum = 0;
   for(int i = 1; i <= 12; ++i) {
       sum += pow;
       pow *= 2;
   }
   Output(sum);
   ```

2. A while-loop executes _______ Zero or more _______ iterations. A do-while-loop executes _______ One or more _______ iterations.

3. What is output by the following code? _______ 22 _______

   ```java
   int v = 42;
   for(int i = 0; i < 5; ++i) {
       if(v % 3 == 0)
           v += 2;
       else if(v % 3 == 1)
           v /= 2;
       else
           v -= 1;
   }
   Output(v);
   ```

4. The _______ continue _______ statement immediately skips to the condition check of a loop, while the _______ break _______ statement skips to the end of the loop.

5. Switch statements are similar to _______ if-else _______ statements, but only works for _______ integral _______ types.