

1. Its purpose is to repeat a statement or a set of statements as long as the loop's condition is met.
2. A while statement reads the condition before executing any loops, whilst the do-while statement executes the loop once before it reads the condition, which ensures that the statements in the loop are executed at least once.
3. The review in which you would write an input validation loop is titled "AccountSetup".
4. A. An infinite loop is a loop that will continue forever until the user manually stops the program. This often happens because the condition continues to be valid after every iteration and therefore the program will never end.
B. Syntax errors and Logic errors.
C. It means that there are not enough bits to store a number.
5. 60 times.
6. Any number less than 123.
7. A counter counts the number of loop iterations and is useful for keeping track of things like number of user guesses or number of times a user enters their password. On the other hand, an accumulator sums values that the user inputs, which can be used for things like keeping track of the user's money in a bank account, or for a fitness tracker that counts the total number of calories burned.
- 8.

```
int o = 0;

for (int i = 3; i <= 10; i++)
{
    o = o + i;
}
System.out.println(o);
```

9. 1. Do you want an infinite loop or a finite loop?
2. Do you want the condition to be evaluated before or after the first iteration?
11. A. 9
B. "my "