

Chapter 6 Critical Thinking

1.

The purpose of a loop structure is to execute a set of statements over and over again based on a condition.

2.

Answers will vary. A possible answer is:

A while statement evaluates the condition before the statements are executed. A do-while statement evaluates the condition after the first execution of a loop.

3.

The Prompter Review.

4.

a) An infinite loop is a loop that continues forever.

b) Two types of errors that can lead to an infinite loop are a syntax error, such as a semicolon after the condition and a logic error, such as the condition of the loop always remaining true.

c) Overflow occurs when there are not enough bits to store a number.

5.

60.

6.

This would not become an infinite loop regardless of the initial value of x.