Section 4.1 Questions

True/False

1. An integer is a number with digits after the decimal point. F. (Positive or negative whole numbers)
2. The byte data type has a range of values of 0 to 255. F.(-128 to 127)
3. A variable of type long can store the number 3,000,000,000. T.
4. Each char variable can store one character. T.
5. A float variable has 10 digits of precision. F. (7 digits of precision)

Short Answer

1. What integer data type is necessary to store the value 4,199,999,999? Type long
2. Why is it important to use data types that store your data efficiently? To decrease the memory usage and increase speed of a computer to access the data types that require
3. more memory.
4. What range of values can be stored in an int variable? -2,147,483,648 to 2,147,483,647
5. What floating-point data type provides the most digits of precision? Type double
6. What is a Boolean variable? A variable that can only have two possible values. One value represents true (or some other form if the affirmative) and the other represents false (or some other form of the negative).