Operators

**Arithmetic Operators**

1. Write a line of code that multiplies the numbers 19 and 35 together and stores the result in a variable named answer.
2. What is the result of the following operations  
   1. 7 % 2
   2. 20 % 2
   3. 33 % 5
3. What is the result of the following operations
   1. 8 / 3
   2. 3 / 4
   3. 3.0 / 4.0
   4. 3.0 / 4
4. What is the result of the following operations
   1. 2 + 10 \* 3
   2. (20 / 5) + (30 / 6)

**Data Conversion**

1. What is the drawback of a narrowing conversion?
2. If the double value 98.6 was converted to an int value what would be the result?
3. If the double value 0.75 was converted to an int value what would be the result?
4. The assignment operator can be used to perform a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ conversion.
5. Arithmetic conversion happens \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
6. What values do the variables a and b contain after the following code has been executed:

double a = 20.75;

|  |  |
| --- | --- |
| a | b |
|  |  |

int b = (int)a;

1. What is the result of the following operations  
   1. 1 / 2
   2. (double)1 / 2

**More Operators**

1. What value is contained in the variable count after the following code is executed:

int count = 14;

count++;

1. What value is contained in the variable count after the following code is executed:

int count = 14;

count--;

1. What value is contained in the variable count after the following code is executed:

int count = 14;  
count += 20;

1. What value is contained in the variable count after the following code is executed:

int count = 14;  
count = count + 20;

1. What value is contained in the variable count after the following code is executed:

int count = 14;  
count \*= 2;