

CMP167 – Quiz #05

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Name: _____

Results: _____

Class: _____

Date: _____

1. A loop that never terminates is called:
 - a. busy
 - b. indefinite
 - c. tight
 - d. infinite
2. What statement can be executed in the body of a loop to cause it to terminate?
 - a. if
 - b. input
 - c. break
 - d. exit
3. What does the following expression evaluate to:
`a and (b or c) == (a and b) or (a and c)`
4. The term for an operator that may not evaluate one of its subexpressions is:
 - a. indefinite
 - b. exclusive
 - c. short-circuit
 - d. faulty

5. What is the difference between a class and an object?

6. The greatest common divisor (GCD) of two values can be computed using Euclid's Algorithm. Starting with the values m and n , we repeatedly apply the formula: $n, m = m, n \% m$ until m is 0. At this point, n is the GCD of the original m and n . Write a function that accepts parameters for the numbers m and n and returns their GCD.

7. Write a function that accepts a list of integers as a parameter and returns the sum of the numbers in that list that is divisible by 3 but not 5.

Extra Credit: Putting it all together. Write a function that accepts two lists as parameters, finds the sums of the elements in those lists divisible by 3 but not 5, and returns the GCD of those two sums. You can and should use the functions you wrote for Problems 6 and 7 to answer this question. Use the back of this page to answer your question.