EX 1. What is the order of the following functions.

“Find the Bog O for each”

1. 10n^2 + 100n + 1000 = O(n^2)
2. 10n^3 – 7 = O(n^3)
3. 2^n + 100n^3 = O(n^3)
4. n^2 log n = O(n^2 log n)

Ex 2. Arrange the growth functions in the previous exercise in ascending order of efficiency. “Use n=100 Only”

1. 10n^2 + 100n + 1000 = O(n^2) = 111000
2. n^2 log n = O(n^2 log n) = 20000
3. 10n^3 – 7 = O(n^3) = 9999993
4. 2^n + 100n^3 = O(n^3) = 1267650600228229401496325376

Ex 3. “Give the Big O of the given function.”

1. It is a nested for loop where the for is less than n in both cases therefore O(n^2)