**Assignment Four**

**Question 1**

Array Size =

Probability of finding A/B/C/D if they exist in the array (equally likely)

1. Average number of array locations to inspect to find the first D = (Slide 13)
2. Average number of array locations to inspect to find 10 Ds (Slide 15)
3. Average time complexity

**Question 2**

Based on the hint given for n=7

For n=15

Therefore, for any n,

**Question 3**

is a geometric series sum that converges to 1.

= 2