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Class: CS361

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Exercise #1 CS361 Winter 2017 Due 1/30/2017.

I. Multiple choice

- 1.  $T(n) = 3T(n/2) + n = \Theta(n^{\log_2 3})$ . In addition, you achieve this by using Master Theorem's with case? a. Case 1  $\leftarrow$  b. Case 2 c. Case 3
- 2.  $T(n) = 4T(n/2) + n = \Theta(\underline{n^2})$ . In addition, you achieve this by using Master Theorem's with case? a. Case 1  $\leftarrow$  b. Case 2 c. Case 3
- 3.  $T(n) = 3T(n/3) + n = \Theta(nlogn)$ . In addition, you achieve this by using Master Theorem's with case? a. Case 1 b. Case 2  $\leftarrow$ c. Case 3
- 4. T(n) = 2T(n/2) + n = Θ(nlogn). In addition, you achieve this by using Master Theorem's with case?
  a. Case 1
  b. Case 2←
  c. Case 3
- 5.  $T(n) = 7T(n/3) + n = \Theta(n^{\log_3 7})$ . In addition, you achieve this by using Master Theorem's with case? a. Case 1  $\leftarrow$  b. Case 2 c. Case 3