

CS 361, HW3

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Due: Sept. 20th

“Our greatest weariness comes from work not done” - Eric Hoffer

1. Draw the recursion tree for $T(n) = 4T(n/2) + cn$ where c is a constant and provide a tight asymptotic bound on its solution. Verify your bound by the substitution method.
2. Exercise 4.3-1
3. Exercise 4.3-2
4. Exercise 4.3-3
5. Exercise 4.3-4
6. Problem 4-1 (hint for part h: read the “Changing Variables” section in Chapter 4.1)
7. Problem 4-6
8. Extra Credit: Problem 4-2