"Typical Exam Questions" (TEQs)

Ways to prepare for an exam.

- Watch the lectures and do the reading each week.
- · Review lecture slides before the exam.
- Try solving problems from old exams.



Problem: Not many old exams available

One topic of class meetings for COS 488 will be to develop good questions for future exams.

Properties of a good exam question.

- Easy to understand.
- Easy to grade.
- Solvable in 10 minutes or less.
- Tests understanding of an important topic.
- "Fair" (no tricks)
- Teaches something (optional but desirable)

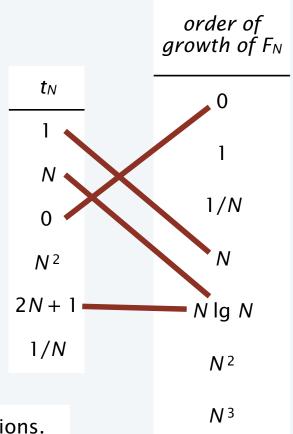


The ability to ask good questions is a skill everyone should learn (but is often overlooked).

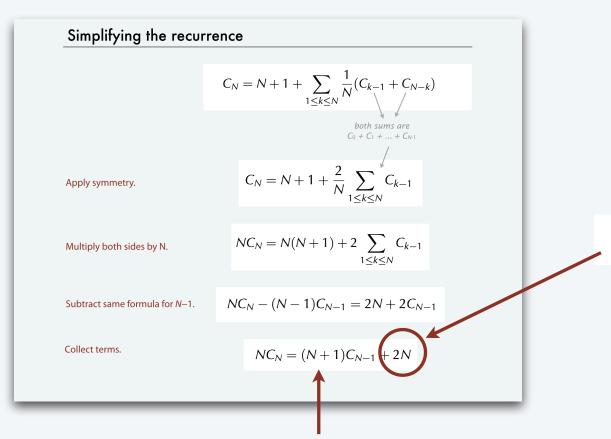
AofA Intro TEQ 1

Q. Match each "toll function" at left with the order of growth of the solution at right for the Quicksort recurrence

$$F_N = t_N + \frac{1}{N} \sum_{1 \le k \le N} (F_{k-1} + F_{N-k})$$
 with $F_0 = 0$



Note. We try hard to avoid answers that depend on detailed calculations.



$$Nt_N - (N-1)t_{N-1}$$

IMPORTANT: Holds for N > 1 with $C_1 = 1$