For up to 6 extra credit points, bring an outline covering at least three distinct counting methods/problems from chapter 1 which we have studied.

For each counting method, give

- a 2-3 sentence description of the type of counting problem involved, e.g. “…when we need to count the number of ways to choose \( r \) items from a collection of \( n \) distinct items, and [further details follow].” Include ways to distinguish this type of problem from others we have studied.
- Give also a 1-3 sentence description of a way to think about the problem, which should include, but go well beyond, a formula for the desired result.
- Finally, give a brief example problem, solved, in which your solution refers to your earlier description of the type of problem and way to think about the problem.

Above all, your outline should reflect a vigorous attempt on your part to understand what’s going on with these problems. Thus, copying sentences out of the text is probably not an effective method.

In fact, making outlines such as this is an effective (and really, necessary) way to study for exams and quizzes; I’m just giving you some points for getting started on doing it.

Turn in by Friday afternoon, 3 p.m. in class or at my office.

Ultra-bonus:
For an extra 2 points (or just 2 points if you choose not to do the extra credit assignment above), fill out the form below and bring it to my office hours this week. If my regular hours (on my website) don’t work for you, make an appointment for some other time, e.g. Friday afternoon.

Name__________________________________ Year at Willamette (1\(^{st}\), 2\(^{nd}\), etc)

Intellectual interests _____________________________________________________

________________________________________________________________________

Last math class taken before Discrete (include when, where)

________________________________________________________________________

How did that class go? ( ) Aced it ( ) Got at least a B ( ) Passed w/o undue difficulty ( ) Passed with difficulty ( ) Didn’t pass

Regarding Discrete Math, ( ) I am quite confident in my ability ( ) I’m not sure how this will go ( ) I am a bit concerned about having trouble ( ) I am really worried about this class

My other courses this term:________________________________________________________________________