

<http://u.arizona.edu/~mccann/classes/144>

Practice Homework #4

⇒ (0 points) ⇐

“Due” Date: May 2/3, 2023, in SI Meetings

Directions

Because we have the final exam in a week, there’s not enough time to have a real homework graded and returned before the exam. However, we’re confident that you will benefit from working some problems on recently-introduced material that will be covered by the exam, even if we do not collect your answers. Thus, we offer this *uncollected, ungraded* homework. We recommend that you treat it as you would a regular homework: Write complete answers to all of the questions, do your own work, and show that work, when appropriate. The TAs will entertain questions on these problems during SI sessions (and in office hours and review session(s), of course).

Incentive: As encouragement to work through these problems, I’ll select one of them to be on the exam. Should be easy points . . . if you do this ‘homework!’

Section 6.4: Binomial Coefficients and Identities:

1. Section 6.4, 3
2. Section 6.4, 9
3. Section 6.4, 23
4. Section 6.4, 25(a,b)

Section 6.5: Gen. Permutations & Combinations:

5. Section 6.5, 5
6. Section 6.5, 11
7. Section 6.5, 15(a,b)
8. Section 6.5, 33
9. Section 6.5, 45

Section 7.1: Intro to Discrete Probability:

10. Section 7.1, 7
11. Section 7.1, 9
12. Section 7.1, 13
13. Section 7.1, 35(all)

Section 7.2: Probability Theory:

14. Section 7.2, 3
15. Section 7.2, 19(all). See Ex. 13, p. 486-7.
16. Section 7.2, 23
17. Section 7.2, 29
18. Section 7.2, 35

Section 7.4: Expected Value and Variance:

19. Section 7.4, 3
20. Section 7.4, 7
21. Section 7.4, 27. Find both σ^2 and σ .
22. Page 522, 7
23. Page 522, 11

—— Homework —— Stops —— Here! ——

Want some $P(n, r)$ and $\binom{n}{r}$ practice? Try these from Section 6.3: 3, 9, 11(a,d), 17, 19(a,b), 21(a,c), 23, 27(a,b,d), 29(a,b), and 35.