

Chapter 15: The Binomial Formula

This chapter presents one important formula: the binomial formula.

When applying it, the numbers needed may be derived logically, but usually one just memorizes it.

Section 15.1: Sets up the binomial coefficient.

Suggested problems for study: A: pages 258–259: 1–3, 5, and 6; for extra practice: 4.

Section 15.2: Presents the binomial formula. Make note of what must be assumed for it to apply.

Chapter Summary: pages 268 and 269: points 1–3 are helpful.

Review Exercises

Homework (pages 261 and 262): 1, 2, 4, 7, 8

Comments on HW:

For problem 8, first decide if it is appropriate to combine the 2 series of 5 tosses each into one long series of 10 tosses before finding the chance.

Then find the keyword that combines the two series. From that word, decide how the two individual probabilities for the two series of 5 are combined to obtain the answer to the question.

Also look at problems 3, 5, and 10 on pages 261–262, and of less importance problem 6.

Special Review Exercises: Review of the whole course

Look at problems 5, 10, 11(b), and 13 on pages 264, 266, and 267;
and (not as important) problems 2, 4, 6, 12, 15, and 17 on pages 263–268.

Two useful introductory problem sets will be found under Chapter Problems.