

Here are some problems from the “Supplemental Problems” at the end of each of the chapters we’ve studied. (There are lots of other problems that you might look at to see if you find any you like better.) Some of them, like #28 on page 188, for example, might be too long or tricky to be suitable for an exam, but you can still benefit from using them for study purposes.

Chapter 1. pages 112–113: #3, #30, #115.

Chapter 2. pages 187–188: #2, #9, #28.

Chapter 4. page 308: #25, #27.

- How can you tell from the binary expansion of a number whether the number is divisible by 3? Prove your answer.

Chapter 5. page 379: #19, #20, #22 (we did #19 in class).

Chapter 6. pages 440–441: any of the counting problems #1 through #15, #16 (I think this is probably done similarly to Example 11 on page 403, but I can’t say for sure because I haven’t done it yet), #18.

Chapter 9. #3, #10, #21.