

MATH 113: DISCRETE STRUCTURES
READING QUESTIONS FOR MONDAY WEEK 4

Reading assignment. *DM:EB* §§3.5, 3.6.

Problem 1. What are the first and last entries of every row of Pascal's triangle? Is there any pattern in each row regarding how the terms increase/decrease?

Problem 2. Make your own large copy of Pascal's triangle (at least through the $n = 15$ row). Highlight or circle all the even entries. Comment as descriptively as you can on the pattern that emerges. *Bonus:* Make a precisely stated conjecture regarding which binomial coefficients are even.