

Homework 13

Math 302 (section 501), Fall 2016

This homework is due on TUESDAY, November 29.

0. (*This problem is not to be turned in.*)
 - (a) Read Sections 6.4–6.5
 - (b) (Practice Problems) Section 6.4 # 2, 4, 15, 19, 21, 23, 24, 28
 - (c) (Practice Problems) Section 6.5 # 2, 3, 6, 10, 22, 24, 26, 46
1. Section 6.4 # 8, 12, 20, 22
2. Section 6.5 # 8, 16, 20
3. (intentionally blank)
4.
 - (a) Assume there are 6 women and 4 men who want to play basketball. How many ways are there to divide the group into two teams so that each team has 3 women and 2 men?
 - (b) Assume there are 8 women and 5 men who want to play basketball. How many ways are there to divide the group into two teams so that each team has 3 women and 2 men?
5.
 - (a) How many ways are there to pick 3 pens from a box that contains 1 red pen, 1 green pen, 1 blue pen, and 1 purple pen? Here, assume that order matters.
 - (b) How many ways are there to pick 3 pens from a box that contains 2 red pens, 1 green pen, 1 blue pen, and 1 purple pen? Here, assume that order matters.
 - (c) How many distinct strings can be made by rearranging the letters in MISSISSIPPI?