Math 262 Reading Guide

Section 2.6.2

Read Section 2.6.2 and answer the following questions. *Hand in this worksheet at the the next class.*

1. The **negative binomial distribution** is based on what type of experiment? How is this different from a binomial experiment?

2. What parameters are required to specify a negative binomial distribution?

3. What is the pmf of the negative binomial distribution?

4. How is the **geometric distribution** related to the negative binomial distribution?

5. What are the mean and variance of a negative binomial random variable?

6. Example 2.44 involves both a binomial and a negative binomial distribution. What, specifically, is modeled by each distribution in this example?