## Math 262 Reading Guide

Section 4.1

NAME

Read Section 4.1 and answer the following questions. Hand in this worksheet at the next class.

1. What is the definition of the **joint probability mass function** for two random variables? How is the joint pmf given in Example 4.1?

2. What is the definition of the **marginal probability mass functions** of two random variables? How are the marginal pmfs computed in Example 4.2?

3. What is the definition of the **joint probability density function** for two random variables? How does this definition relate to Figure 4.1?

4. What is the definition of the **marginal probability density functions** of two random variables? How are the marginal pdfs computed in Example 4.4?

5. What is the definition of **independent** random variables?