Math 262 Reading Guide

Sections 2.1 and 2.2

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NAME

Read Sections 2.1 and 2.2, and answer the following questions. *Hand in this worksheet at the next class.*

1. What is the definition of a **random variable**?

2. Are the random variables in Examples 2.1 and 2.2 **Bernoulli random variables**? Why or why not?

3. What is the difference between **discrete** and **continuous** random variables?

4. What information is provided by the **probability mass function (pmf)** of a random variable X?

5. What information is provided by the **cumulative distribution function (cdf)** of a random variable X?

6. In Example 2.11, note that $F(8) - F(4) = p(8)$. Why is this? What is the meaning of the quantities $F(8)$, $F(4)$, and $p(8)$?