Assignment 4

Insert author

Insert date

Abstract

Instructions: Please set the following using

\begin{itemize}
\item \[(a)\]
\item \[(b)\]
\item \[(c)\]
\end{itemize}

Make sure to load the amsmath package. Use following commands in the preamble to simplify the task:

\newcommand{\F}{\mathcal{F}}
\newcommand{\R}{\mathrm{R}}

Experiment with

\noindent \textbf{text to be in bold} \textit{text to be in italics}

Definition. Let $(\Omega, \mathcal{F})$ be a measurable space. A probability measure $P$ on $(\Omega, \mathcal{F})$ is a function $P : \mathcal{F} \rightarrow \mathbb{R}$ satisfying

(a) $P(A) \geq 0$, if $A \in \mathcal{F}$,

(b) $P(\Omega) = 1$, and,

(c) if $A_1, A_2, \ldots$ is a collection of mutually exclusive events in $\mathcal{F}$, then

$$P \left( \bigcup_{i=1}^{\infty} A_i \right) = \sum_{i=1}^{\infty} P(A_i).$$

The triple $(\Omega, \mathcal{F}, P)$ is called a probability space.