

```
%A.DOCUMENTCLASSES.  
%The document class produces a style for the document.  
%Most papers work fine with the next one.  
%For letter style see the letter document on the website.  
% For presentations, see a beamer document on the website.  
%  
\documentclass[10pt]{article}  
\documentclass[blue]{beamer}  
\documentclass[10pt]{letter}
```

%B.PACKAGES to ADD

```
%The next commands are for latex packages which we sometimes use.
```

```
%  
\usepackage[ansinew]{inputenc}  
\usepackage{color}  
\usepackage{enumerate,latexsym}  
\usepackage{amsmath,amssymb}  
\usepackage{graphicx}  
\usepackage{amsmath,amssymb}  
\usepackage{amsxtra}  
\usepackage{amsfonts}  
\usepackage{enumerate}  
\usepackage{showkeys}  
%COMMENT: The next 2 software packages are only for presentations.  
%  
\usepackage{beamerthemeshadow}  
\setbeamertemplate{navigation symbols}{}  
%
```

%C. PAGE LAYOUT.

```
%The following commands are not for presentations!  
%These commands are for creating margins, text width, text length  
%and double spacing for papers.  
%  
\setlength{\oddsidemargin}{10pt} \setlength{\evensidemargin}{10pt}  
\setlength{\textwidth}{430pt}  
\textwidth 15cm  
\oddsidemargin .2cm \evensidemargin .2cm  
\textheight 20cm  
\topmargin -.3cm  
\renewcommand{\baselinestretch}{2}
```

%D.COLORS.

```
%These commands are for colors for papers and presentations.  
%Note that \rrr makes RED, \%bbb makes BLUE,  
%\ppp makes PURPLE and \ggg makes GREEN.  
\definecolor{b}{rgb}{.1,.1,.7}  
\definecolor{rr}{rgb}{.8,0,.3}  
\definecolor{g}{rgb}{0,.5,0}  
\definecolor{pp}{rgb}{.5,0,.7}
```

```

\definecolor{r}{rgb}{.6,0,.3}
\definecolor{y}{rgb}{.9,.99,.9}
\newcommand{\rrr}{\textcolor{rr}}
\newcommand{\bbb}{\textcolor{b}}
\newcommand{\ppp}{\textcolor{pp}}
\renewcommand{\ggg}{\textcolor{g}}
\newcommand{\grr}{\ggg}
\newcommand{\bbi}{\bbb}
%
```

%E.ABBREVIATIONS.

%The next commands are abbreviations used frequently
% especially in multi-variable calculus.

```

\newcommand{\vr}{\ppp{\bf r}}
\newcommand{\va}{\ppp{\bf a}}
\newcommand{\vi}{\rrr{\bf i}}
\newcommand{\vj}{\rrr{\bf j}}
\newcommand{\vk}{\rrr{\bf k}}
\newcommand{\vu}{\rrr{\bf u}}
\newcommand{\vb}{\bbb{\bf b}}
\newcommand{\vv}{\bbi{\bf v}}
\newcommand{\vn}{\ppp{\bf n}}
\newcommand{\vw}{\ppp{\bf w}}
\newcommand{\rR}{\rrr{\bf R}}
\newcommand{\rA}{\rrr{\bf A}}
\newcommand{\rrth}{\bf \rR}^{\bf 3}
\newcommand{\rrtw}{\bf \rR}^{\bf 2}
\renewcommand{\v}{\overset{\longrightarrow{}}{}}
```

%F.NEGATIVE SPACE

%The next 3 commands are for negative spacing and are
%used frequently in presentations.

```

\newcommand{\vsp}{\vspace{-1cm}}
\newcommand{\vs}{\vspace{-2cm}}
\newcommand{\vspa}{\vspace{-3cm}}
```

%G. NUMBERED THEOREMS, DEFINITIONS,...

%These commands are for papers only.

%(for presentations, they need to be commented out).

%They create numbered theorems and other numbered objects like definitions

% The ``section'' part produces numbering by section.

%If you remove that part, then the section number

%where the "theorem" is located will not appear

%in the numbering of the statement of the "theorem".

%

```

\newtheorem{theorem}{Theorem}[section]
\newtheorem{definition}{Definition}
%\newtheorem{definition}{Definition}[section]
```

```

%G'.
%Some commands mostly for presentations.
%
\newtheorem{conjecture}{Conjecture}
\newtheorem{history}{\large History}
\newtheorem{question}[theorem]{Question}
\newtheorem{Case}{Case}
\newtheorem{notation}{Notation}

%H.SHORTHANDS \def and \newcommand.
%The command \def is used create abbreviations for
%frequently used symbols like the math symbol for capital R
%that we use to denote the real numbers or the Greek letter theta.
%
%For longer abbreviations or commands, we usually use the command
%\newcommand. For example, instead of typing \end{document}
%I usually type \ed instead.
%
%It may not be a good idea to use too many of
%these abbreviations if someone else (a coauthor) is
%reading your tex document, they may not understand.
%
\def\R{\mathbb{R}}
\def\t{\theta}
\def\rth{\mathbb{R}^3}
\newcommand{\ben}{\begin{enumerate}}
\newcommand{\bit}{\begin{itemize}}
\newcommand{\een}{\end{enumerate}}
\newcommand{\eit}{\end{itemize}}
\newcommand{\ed}{\end{document}}


%X. GRAY shaded BLOCKS in presentations.
%The next 2 commands are for creating gray shaded blocks in presentations.
\newcommand{\bblock}{\begin{block}}
\newcommand{\eblock}{\end{block}}

```

```

\begin{document}
\title{
}
\author{
}
\date{\today}
\maketitle
%%% INSERT TEXT
\end{document}

```