

General Information

LaTeX is a document markup language that will help you produce beautiful mathematical solutions. It allows you to produce professional-looking pdf or dvi documents with relative ease. It's used by science researchers to typeset their documents in a consistent way, that is, you fill in the information and LaTeX worries about the visual presentation. Genius.

There are a lot of free LaTeX distributions that you can easily acquire for any platform, or you can use the King computer labs. The current version is LaTeX2e. There should be a tutorial on the course website, with *plenty* other useful pages on the web (including Wikipedia, of course).

Math Stuff

Once you've done the tutorial, you'll be set to go. I'll post a skeleton LaTeX file on the website with the basics you'll need for your solutions. Just in case, though, here is a listing of some math symbols that will be useful to you. Math stuff must be enclosed by '\$'s or '\[and \]'.

Set symbols:

symbol	latex	symbol	latex	symbol	latex	symbol	latex
\subset	<code>\subset</code>	$\not\subset$	<code>\not\subset</code>	\cap	<code>\cap</code>	$=$	<code>=</code>
\subseteq	<code>\subseteq</code>	$\not\subseteq$	<code>\not\subseteq</code>	\cup	<code>\cup</code>	\neq	<code>\neq</code>
\overline{S}	<code>\overline{S}</code>	$S \setminus T$	<code>S \setminus T</code>	$\{$	<code>\{</code>		
$S \times T$	<code>S \times T</code>	$\bigcup_{i=0}^n S_i$	<code>\bigcup_{i=0}^n S_i</code>	$\}$	<code>\}</code>		
\emptyset	<code>\emptyset</code>	v_1, v_2, \dots, v_n	<code>v_1, v_2, \dots, v_n</code>	\notin	<code>\notin</code>	\in	<code>\in</code>

Superscripts, Subscripts, etc.

v_0	<code>v_0</code>	v^0	<code>v^0</code>	\bar{A}	<code>\bar{A}</code>	G'	<code>G'</code>
\tilde{A}	<code>\tilde{a}</code>	\hat{v}	<code>\hat{v}</code>	$e_{ij}^{c^2}$	<code>e_{ij}^{c^2}</code>	c^*	<code>c^*</code>

Proof symbols:

\forall	<code>\forall</code>	\leftarrow	<code>\leftarrow</code>	$\stackrel{def}{=}$	<code>\stackrel{def}{=}</code>	\square	<code>\Box</code>
\exists	<code>\exists</code>	\rightarrow	<code>\rightarrow</code>	\nexists	<code>\not\exists</code>	\iff	<code>\iff</code>
\Rightarrow	<code>\Rightarrow</code>	\Leftarrow	<code>\Leftarrow</code>	\nexists	<code>\not\forall</code>	∞	<code>\infty</code>

Other math symbols:

\div	<code>\div</code>	\geq	<code>\geq</code>	rah	<code>\text{rah}</code>	$\lfloor x \rfloor$	<code>\lfloor x \rfloor</code>
\sqrt{x}	<code>\sqrt{x}</code>	$>$	<code>></code>	bah	<code>\text{bah}</code>	$\lceil y \rceil$	<code>\lceil y \rceil</code>
$\not\geq$	<code>\not\geq</code>	\leq	<code>\leq</code>	tah	<code>\text{tah}</code>	$\sum_{i=0}^n v_i$	<code>\sum_{i=0}^n v_i</code>
$\frac{x}{y}$	<code>\frac{x}{y}</code>	$<$	<code><</code>	pha	<code>\text{pha}</code>	$\prod_{i=0}^n v_i$	<code>\prod_{i=0}^n v_i</code>
α	<code>\alpha</code>	β	<code>\beta</code>	\wedge	<code>\wedge</code>	\vee	<code>\vee</code>