

## 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  $\backslash[$  and  $\backslash]$ .

Language and string symbols:

symbol	latex	symbol	latex	symbol	latex
$\Sigma$	<code>\Sigma</code>	$\Gamma$	<code>\Gamma</code>	$\Delta$	<code>\Delta</code>
$\sigma$	<code>\sigma</code>	$\gamma$	<code>\gamma</code>	$\delta$	<code>\delta</code>
$\delta^*$	<code>\delta^*</code>	$\delta'$	<code>\delta'</code>	$\hat{\delta}$	<code>\hat{\delta}</code>
$\hat{\Delta}'$	<code>\hat{\Delta}'</code>	$\alpha$	<code>\alpha</code>	$\beta$	<code>\beta</code>
$\emptyset$	<code>\emptyset</code>	$\epsilon$	<code>\epsilon</code>		

Other math symbols:

$\{$	<code>\{</code>	$\}$	<code>\}</code>	$v_0$	<code>v_0</code>
$\geq$	<code>\geq</code>	$\leq$	<code>\leq</code>	$v^0$	<code>v^0</code>
$=$	<code>=</code>	$\neq$	<code>\neq</code>	$\forall$	<code>\forall</code>
$\subseteq$	<code>\subseteq</code>	$\not\subseteq$	<code>\not\subseteq</code>	$\exists$	<code>\exists</code>
$\in$	<code>\in</code>	$\notin$	<code>\notin</code>	$\stackrel{def}{=}$	<code>\stackrel{def}{=}</code>
$\bar{A}$	<code>\bar{A}</code>	$\tilde{A}$	<code>\tilde{a}</code>	$\times$	<code>\times</code>
$\cap$	<code>\cap</code>	$\cup$	<code>\cup</code>	$\div$	<code>\div</code>
$\rightarrow$	<code>\rightarrow</code>	$\leftarrow$	<code>\leftarrow</code>	$\frac{x}{y}$	<code>\frac{x}{y}</code>
$\Rightarrow$	<code>\Rightarrow</code>	$\Leftarrow$	<code>\Leftarrow</code>	$\sqrt{x}$	<code>\sqrt{x}</code>
$\sum_{i=0}^n v_i$	<code>\sum_{i=0}^n v_i</code>	$\prod_{i=0}^n v_i$	<code>\prod_{i=0}^n v_i</code>	$\square$	<code>\square</code>
$\text{rah}$	<code>\text{rah}</code>	$\text{bah}$	<code>\text{bah}</code>	$\text{tah}$	<code>\text{tah}</code>