CSCI 280 Spring 2009 **LaTeX Resource**

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:

symb	latex	symb	latex	symb	latex	symb	latex
$\subset$	`\subset`	$\not\subset$	`\not\subset`	$\cap$	`\cap`	$=$	`=`
$\subseteq$	`\subseteq`	$\not\subseteq$	`\not\subseteq`	$\cup$	`\cup`	$\neq$	`\neq`
$\overline{S}$	`\overline{S}`	$S \setminus T$	`S \setminus T`	$\{$	`\{`		
$S \times T$	`S \times T`	$\bigcup_{i=0}^{n} S_i$	`\bigcup_{i=0}^n S_i`	$\}$	`\}`		
$\emptyset$	`\emptyset`	$v_1, v_2, \ldots, v_n$	`v_1, v_2,\ldots, v_n`	$\notin$	`\not\in`	$\in$	`\in`

Superscripts, Subscripts, etc.

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

Proof symbols:

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

Other math symbols:

$\div$	`\div`	$\geq$	`\geq`	rah	`\textrm{rah}`	$\lfloor x \rfloor$	`\lfloor x \rfloor`
$\sqrt{x}$	`\sqrt{x}`	$>$	`>`	**bah**	`\textbf{bah}`	$\lceil y \rceil$	`\lceil y \rceil`
$\not\geq$	`\not\geq`	$\leq$	`\leq`	tah	`\texttt{tah}`	$\sum_{i=0}^{n} v_i$	`\sum_{i=0}^n v_i`
$\frac{x}{y}$	`\frac{x}{y}`	$<$	`<`	*pha*	`\emph{pha}`	$\prod_{i=0}^{n} v_i$	`\prod_{i=0}^n v_i`
α	`\alpha`	β	`\beta`	$\wedge$	`\land`	$\vee$	`\lor`