

USEFUL FONTS AND OTHER HINTS,
(IF YOU USE L^AT_EX FOR PROBABILITY HOMEWORK)

See the source file *fonts.tex* (or the listing at the end of this document) for the way to get access to these fonts. It involves packages *amsfonts*, *euscript*, and *eufrak*, which are all included with the standard L^AT_EX distribution.

- Blackboard bold (mathbb):

A B C D E F G H I J K L M
N O P Q R S T U V W X Y Z

- Calligraphic (Euscript):

A B C D E F G H I J K L M
N O P Q R S T U V W X Y Z

- Fraktur (Eufrak), looks fancy but can be hard to decipher:

Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm
Nn Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz

Some bad things.


- A distinction to note: use $\epsilon \in \mathbb{R}$ for $\epsilon \in \mathbb{R}$. Please don't use ϵ where you mean \in . And while I am at it: What's wrong with $\sqrt{2} \subset \mathbb{R} \setminus \mathbb{Q}$ and $\mathbb{Q} \in \mathbb{R}$?
- Don't type $x = \frac{\frac{a}{b}}{\frac{c}{d}}$. It will give the monstrosity

$$x = \frac{\frac{a}{b}}{\frac{c}{d}}$$

Better to try something like

$$x = \frac{a/b}{c/d}$$

- Similarly, $x^{\frac{a}{b}}$ is better written as $x^{a/b}$.

- My eyes have trouble with deeply nested sub- or superscripts, as in expressions like $x_{i_{j_{k_\ell}}}$ or $\int_{A_{ig_3}}$.
- And what does
“ \therefore I live in Connecticut, but head south in September
 \therefore the sky is blue
 \therefore I like summer
 \therefore it is too cold in winter, ...”
mean? What does the first \therefore refer to? Please resist the urge to hand in homework that consists of strings of equations linked by \therefore 's and \therefore 's. It can get very hard to decipher. Dana and I will be most unhappy. 
- Mathematics and sentences: “Define $x = 3y$. $w > z$ and ...”. Is the period between y and w a multiplication or the end of the sentence? In general, try to avoid starting a sentence with a mathematical symbol.