LATEX Symbol Set #4

Friday, February 15

1 Symbols

There are not many symbols this week, but typesetting tricks will be given in Examples.

Symbol	LATEX Code
$\binom{n}{k}$	`{n \choose k}`
$\mathcal{P}$	`\mathcal P`
∞	`\infty`
$\sqrt{2}$	`\sqrt{2}`

2 Examples

Expression	LATEX Code
$\binom{n}{k} = \frac{n!}{k!(n-k)!}$	`{n\choose k}=\frac{n!}{k!(n-k)!}`
$\|\mathbb{N}\| = \infty$	`|\mathbb N|=\infty`
$x \ R \ y$	`x\_R\_y`
$x \not R \ y$	`x\not\!\!R\_y`
$\left[(x+y)^2 + 50\right] > 0$	`\left[(x+y)^2+50\right]>0`
$\left(2^2\right)^2 = 2^4 = 16$	`\left(2^2\right)^2=2^4=16`
$\left(\left(2^2\right)^2\right)^2 = 2^8 = 256$	`\left(\left(2^2\right)^2\right)^2=2^8=256`
$\sqrt[3]{2}\sqrt[n]{4}$	`\sqrt[3]{2}\sqrt[n]{4}`

Remark: ␣ denotes a space.

3 Exercises

Try typesetting these statements.

1. $(x + y)^n = \sum_{k=0}^{n} \binom{n}{k} x^k y^{n-k}$

2. $\binom{n}{k} = \binom{n-1}{k-1} + \binom{n-1}{k}$

3. $\frac{1}{\sqrt{2}} = \frac{\sqrt{2}}{2}$

4. $2^{\frac{4}{3}} = \sqrt[3]{16} = 2\sqrt[3]{2}$

5. $\left| \left\{ x^2 \left[x^3 \left(x^4\right)^5 \right]^6 \right\}^7 \right| = \left| x^{980} \right|$