Contents

1 Math

Math font styles

$$A$$
$$A$$
$$A$$
$$\mathrm{A}$$
$$\mathcal{A}$$
$$\mathscr{A}$$
$$\mathfrak{A}$$
$$\mathbb{A}$$

```
\begin{align*}
        &A\\
        &\mathord{A}     \\ % default
        &\mathit{A}      \\ % default
        &\mathrm{A}      \\
        &\mathcal{A}     \\
        &\mathscr{A}     \\
        &\mathfrak{A}    \\
        &\mathbb{A}
\end{align*}
```

Numbers

$$\mathbb{N} \subseteq \mathbb{Z} := \mathbb{R} \setminus \mathbb{Q}\ \lightning$$

But also works in text like $\mathbb{Q}$, $\mathbb{R}$ and $\mathbb{C}$. $\mathbb{Q}x\forall y.x + \mathbb{1} * y^{-1} \neq \emptyset$

```
\[
        \N \subseteq \Z \coloneqq \R
    \setminus \Q \contra
\]
But also works in text like \Q, \R and
    \C.
$\quantor x \forall y. x + \mathbb{1}
    * y^{-1} \neq \blank$
```

2 Complexity Classes

Complexity Classes

P, NP and APX are some complexity classes. Clever spacing (NP-complete), inline math mode (P $\subseteq$ NP) and display style

$$P \neq \text{ExpTime}$$

are supported.
There is also

- kExpTime
- NkExpTime
- 4ExpTime
- N4ExpTime
- kExpSpace
- 5ExpSpace

```
\PTime, \NP and
    \complclass{APX} are some
    complexity classes.
Clever spacing (\NP-complete),
inline math mode ($\PTime
    \subseteq \NP$)
and display style
\[
    \PTime \neq \ExpTime
\]
are supported.

There is also
\begin{itemize}
    \item \kExpTime
    \item \NkExpTime
    \item \kExpTime[4]
    \item \NkExpTime[4]
    \item \kExpSpace
    \item \kExpSpace[5]
\end{itemize}
```
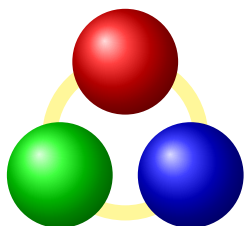
A About this document

```
\begin{latex-example}[lefthand width=3.5cm]{Test123}
\begin{tikzpicture}
\path[fill=yellow!50!white] (0,0) circle (11mm);
\path[fill=white] (0,0) circle (9mm);
\foreach \w/\c in {90/red,210/green,330/blue}
{\path[shading=ball,ball color=\c] (\w:1cm) circle (7mm);}
\end{tikzpicture}
\end{latex-example}
```

Test123


```
\begin{tikzpicture}

\path[fill=yellow!50!white]
(0,0) circle (11mm);
    \path[fill=white] (0,0)
circle (9mm);
    \foreach \w/\c in
{90/red,210/green,330/blue}

{\path[shading=ball,ball
color=\c] (\w:1cm) circle
(7mm);}
    \end{tikzpicture}
```