Typesetting Technical Formulas

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http://go.unimelb.edu.au/6mhi

https://meirian.gitbook.io/latex

Learning objectives

- Demo: Dollar signs;
- Challenge 1: replicate;
- Video;
- Demo: Aligning equations;
- Challenge 2: your turn.

$$\sin\left(\frac{\pi}{3}\right) = \frac{\sqrt{3}}{2}$$

$$f(x) = \frac{1}{\sigma\sqrt{2\pi}} e^{-\frac{1}{2}\left(\frac{x-\mu}{\sigma}\right)^2}$$

`https://meirian.gitbook.io/latex` # `http://go.unimelb.edu.au/6mhi`

Demo

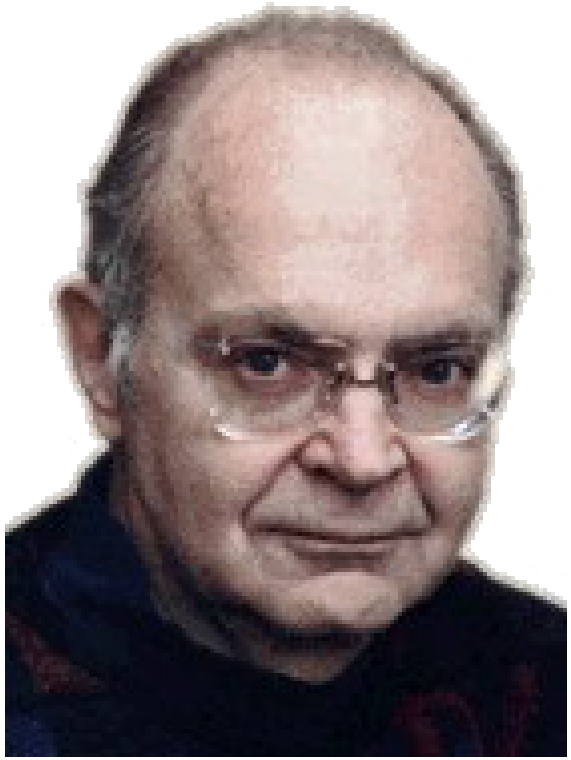

Figure: Prof. Emeritus Donald E. Knuth

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Demo

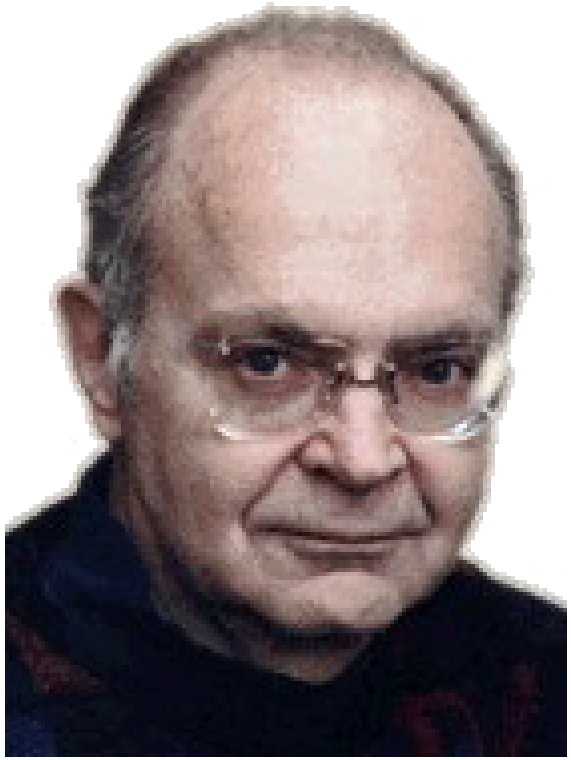


Figure: Prof. Emeritus Donald E. Knuth

`www.overleaf.com`

`https://meirian.gitbook.io/latex` # `http://go.unimelb.edu.au/6mhi`

Cheat sheet

Cheat sheet:

http://go.unimelb.edu.au/g7fi

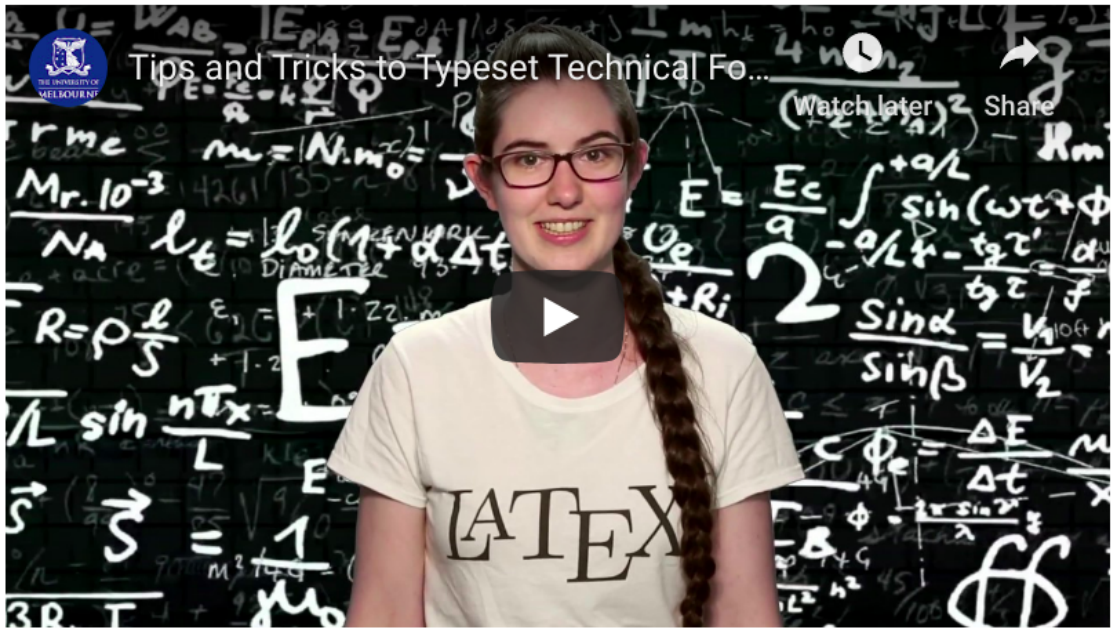
Challenge

- Replicate the following example using math-mode:

$$\sin\left(\frac{\pi}{3}\right) = \frac{\sqrt{3}}{2}$$

- *Hint:* Use the cheat sheet: `go.unimelb.edu.au/e4xj`
- *Bonus:* Copy the probability density function of the normal distribution into LaTeX.

Video: Tips and Tricks to Typeset Technical Formulas



http://go.unimelb.edu.au/fc4r

https://meirian.gitbook.io/latex # http://go.unimelb.edu.au/6mhi

Demo

Aligned and numbered mathematics:

$$e^{i\pi} = \cos(\pi) + i\sin(\pi) \tag{1}$$

$$= -1 \tag{2}$$

Challenge

- Copy the probability density function of the normal distribution into LaTeX.
- Type the most difficult mathematics problem you can think of or find!
- Bonus: Attempt to solve someone else's problem.

Kahoot quiz

How much do you remember?

`www.kahoot.it`

Thank you

Thanks for coming — I hope you enjoyed the workshop!

- Feedback survey: `http://go.unimelb.edu.au/xz2i`
- Find all my favourite resources here: `https://meirian.gitbook.io/latex`
- Digital skills support on Slack: `http://go.unimelb.edu.au/6mhi`
- Upcoming events: `http://go.unimelb.edu.au/ye2i`