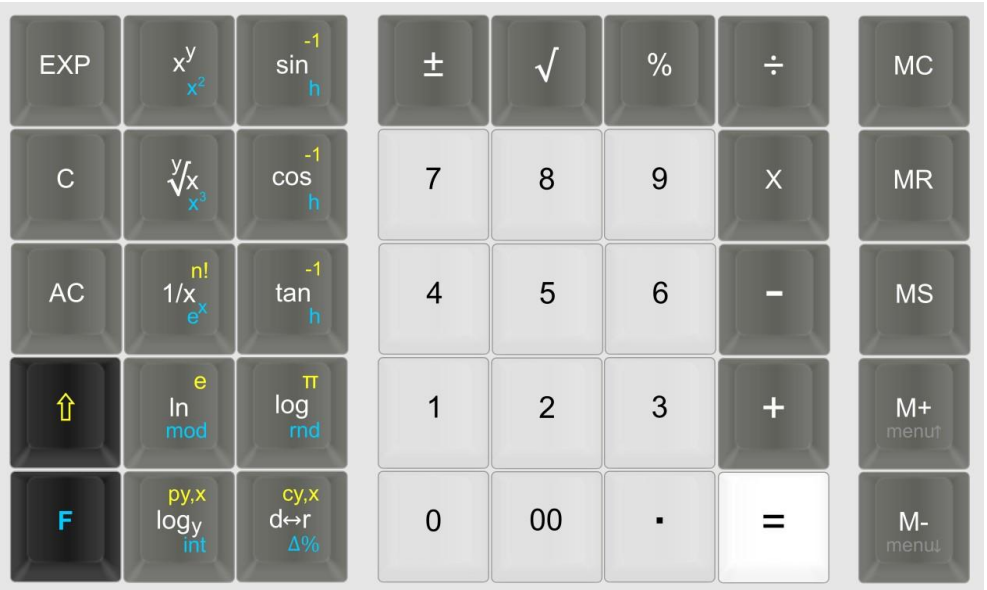# Keyboard layout and keycaps

For this project we need some custom Cherry MX keycaps. I came up with the keyboard layouts as shown in the pictures. All keycaps are 1x1.

## RPN version

| EXP | $x^y$ / $x^2$ | $\sin^{-1}$ / h | $\pm$ | $\sqrt{}$ | % | $\div$ | lstx / X↔Y |
|---|---|---|---|---|---|---|---|
| clx / ⇐ | $\sqrt[y]{x}$ / $x^3$ | $\cos^{-1}$ / h | 7 | 8 | 9 | X | R↑ / R↓ |
| CLS | n! / $1/x$ / $e^x$ | $\tan^{-1}$ / h | 4 | 5 | 6 | − | CLR |
| ⇧ | e / ln / mod | $\pi$ / log / rnd | 1 | 2 | 3 | + | STO / menu↑ |
| F | py,x / $\log_y$ / int | cy,x / d↔r / Δ% | 0 | 00 | . | ENT | RCL / menu↓ |

## ALG version

| EXP | $x^y$ / $x^2$ | $\sin^{-1}$ / h | $\pm$ | $\sqrt{}$ | % | $\div$ | MC |
|---|---|---|---|---|---|---|---|
| C | $\sqrt[y]{x}$ / $x^3$ | $\cos^{-1}$ / h | 7 | 8 | 9 | X | MR |
| AC | n! / $1/x$ / $e^x$ | $\tan^{-1}$ / h | 4 | 5 | 6 | − | MS |
| ⇧ | e / ln / mod | $\pi$ / log / rnd | 1 | 2 | 3 | + | M+ / menu↑ |
| F | py,x / $\log_y$ / int | cy,x / d↔r / Δ% | 0 | 00 | . | = | M− / menu↓ |

I ordered the keycaps from a provider, but I also have built a calculator using transparent keycaps from X-keys. I created the design with Inkscape (Keycaps/keycaps.svg), then printed the "Legends" and the "Background" layers on glossy photo paper and finally cut out the "Keys" layer with a cutting plotter.

UV printed commercial keycaps



Keycaps with self-printed legends