

Examples of proof.sty

\infer draws beautiful proof figures easily:

(1)

$$\frac{\frac{B11 \& B12 \& B13}{B} \quad \frac{B21 \& B22 \& B23}{C}}{A}$$

(2)

$$\frac{\frac{B11 \& B12 \& B13}{B} \quad \frac{B21 \& B22 \& B23}{C}}{A1 \& A2 \& A3 \& A4 \& A5 \& A6}$$

(3)

$$\frac{\frac{C}{A1 \& A2 \& A3 \& A4 \& A5 \& A6} \quad \frac{\frac{B11 \& B12 \& B13}{B} \quad \frac{B21 \& B22 \& B23}{B}}{B}}$$

You can use also some variations:

(4)

$$\frac{\frac{B11 \& B12 \& B13}{\vdots} \quad \frac{B21 \& B22 \& B23}{B}}{A} \quad C \quad (1)$$

(5)

$$\frac{\frac{B11 \& B12 \& B13}{\sum_B} \quad \frac{B21 \& B22 \& B23}{C}}{\vdots} \quad (2) \quad C$$

$$\frac{\vdots}{A1 \& A2 \& A3 \& A4 \& A5 \& A6} \quad (1)$$

(6)

$$\frac{\frac{A \& B \& C}{A}}$$

Here are more practical examples:

(7)

$$\frac{A \quad B}{A \& B} \quad (\&I) \quad \frac{A \& B}{A} \quad (\&E_l) \quad \frac{A \& B}{B} \quad (\&E_r)$$

$$\frac{\frac{[A]}{\vdots} \quad B}{A \rightarrow B} \quad (\rightarrow I) \quad \frac{A \rightarrow B \quad A}{B} \quad (\rightarrow E)$$

Some techniques: Use \vcenter for an equation of proofs.

(8)

$$\pi = A \frac{\frac{B}{D} C}{E}$$

Use `\kern` to adjust the form of a proof.

(9)

$$\frac{A}{E} \frac{B}{D} C$$