

1. This is the problem.

Proof. This is the [solution](#).

- (a) It uses
- (b) a lot of
- (c) math symbols,
- (d) like

$$\models, \vdash, \wedge, \vee, \neg, \rightarrow, \leftrightarrow, \mathbb{N} = \langle \text{natural numbers}; +, \cdot \rangle, \text{Th}_{\mathcal{L}}(\mathbf{A}), \varphi, 2^{\aleph_0}$$

fancy stuff

$$\left[MP \stackrel{\text{def}}{=} \frac{\alpha, (\alpha \rightarrow \beta)}{\beta} \right], \quad \left(2020^{2019} \dots^{2^1} \right) !, \quad \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix} \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} = \begin{vmatrix} 1 & 0 \\ 0 & 1 \end{vmatrix}$$

and organized stuff

$$\begin{aligned} m + (n + S(k)) &= m + S(n + k) && \text{(It's true)} \\ &= S(m + (n + k)) && \text{(Because)} \\ &= S((m + n) + k) && \text{(Because)} \\ &= (m + n) + S(k) && \text{(Because)} \end{aligned}$$

□