

Evaluating One Formula Relative to One Valuation

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$$V: \begin{array}{cccccc} (p & \wedge & (p & \rightarrow & q)) & \rightarrow & q \\ 1 & 0 & 1 & 0 & 0 & \mathbf{1} & 0 \end{array} \quad \boxed{V \models (p \wedge (p \rightarrow q)) \rightarrow q}$$

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$$V: \begin{array}{ccc} \neg & \neg & p \\ \mathbf{0} & 1 & 0 \end{array} \quad \boxed{V \not\models \neg\neg p}$$

$$V: \begin{array}{ccccccc} (p & \rightarrow & q) & \vee & (q & \rightarrow & p) \\ 0 & 1 & 1 & \mathbf{1} & 1 & 0 & 0 \end{array} \quad \boxed{V \models (p \rightarrow q) \vee (q \rightarrow p)}$$