1: |A = B|assumption $2: | \forall y.y \in A \leftrightarrow y \in B$ $A=B\triangleq (\forall y.y\in A \leftrightarrow y\in B) 1$ 3: ||var c assumption lc∈A 4: | assumption $5: \| c \in A \leftrightarrow c \in B$ **∀**-E 2 6:|||**c**∈B \leftarrow -E(R) 4,5 $7: \|\mathbf{c} \in \mathbf{A} \rightarrow \mathbf{c} \in \mathbf{B}$ $\rightarrow -14-6$ 8: $|\forall y1.y1 \in A \rightarrow y1 \in B| \forall -1'0 3-7$ 9: **A**⊆**B** $A \subseteq B \triangleq (\forall y.y \in A \rightarrow y \in B) 8$ 10: |B⊆A $11: |A \subseteq B \land B \subseteq A|$ \land –I 9,10 12: $A=B \rightarrow A \subseteq B \land B \subseteq A \rightarrow -11-11$ 13: $A \subseteq B \land B \subseteq A \rightarrow A = B$ 14: $A=B \leftrightarrow A \subseteq B \land B \subseteq A \leftrightarrow -112,13$