

Lesson 6: Universe and Empty Set

Universe Statements

$$\underline{\forall} \underline{U} (\text{Solution}) \rightarrow \underline{\forall}$$

$$\underline{\forall} \underline{n} \{\text{Solution}\} \rightarrow \{\text{Solution}\}$$

$$\underline{\forall} - \{\text{Solution}\} \rightarrow \{\text{Solution}'\}$$

$$\{\text{Solution}\} - \underline{\forall} \rightarrow \underline{\wedge}$$

$$\underline{\forall}' \rightarrow \underline{\wedge}$$

Empty Set Statements

$$\underline{\wedge} \underline{U} (\text{Solution}) \rightarrow (\text{Solution})$$

$$\underline{\wedge} \underline{n} \{\text{Solution}\} \rightarrow \underline{\wedge}$$

$$\underline{\wedge} - \{\text{Solution}\} \rightarrow \underline{\wedge}$$

$$\{\text{Solution}\} - \underline{\wedge} \rightarrow \{\text{Solution}\}$$

$$\underline{\wedge}' \rightarrow \underline{\forall}$$