

4. SIMPLE AND COMPOUND STATEMENTS

Sentences.

- Well-formed (grammatical) sentence, e.g., “Open the door!”
- Statement P : either true or false, e.g, $\pi < 5$
- Open statement $P(x)$:
becomes a statement plugging in x from U ,
e.g., $x < 5$ for $U = \mathbb{R}$

Connectives: making compound statements. $P \wedge Q$: P and Q $P \vee Q$: P or Q $\neg P$ (or $\sim P$ or \overline{P}) : not P

These apply to statements and to open statements.