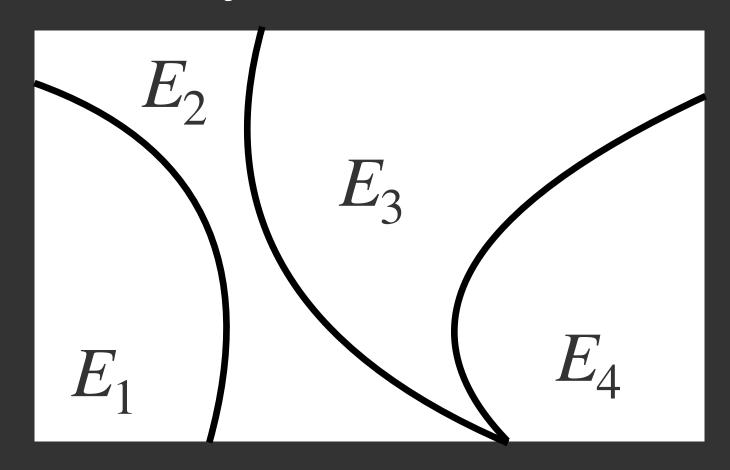
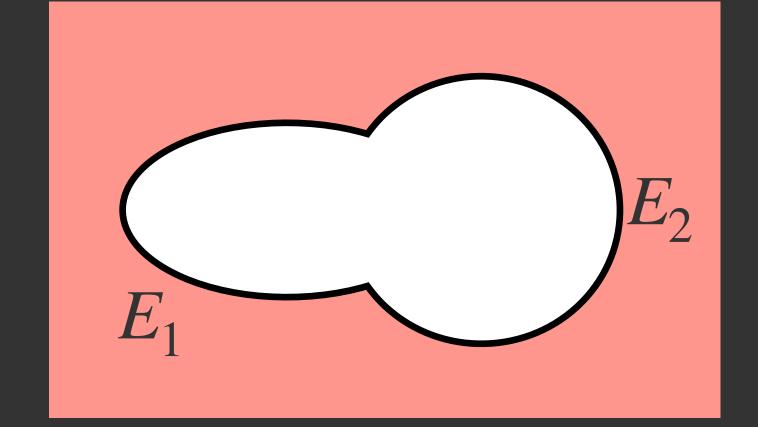
the complement

MECE = mutually exclusive and collectively exhaustive events

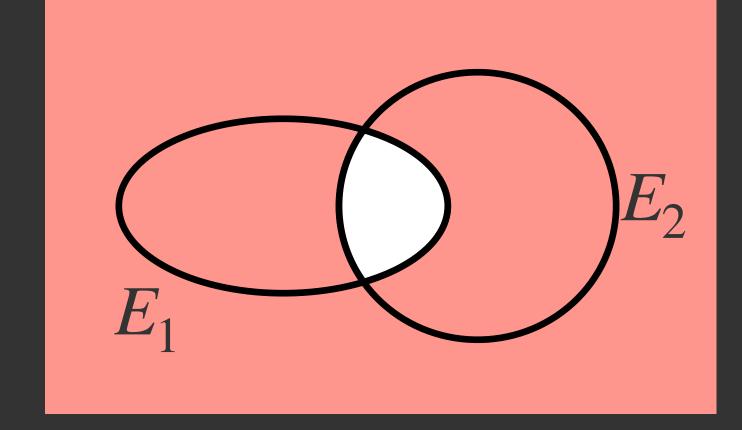


de Morgan's Rules

$$\overline{E_1 \cup E_2} = \overline{E_1} \cap \overline{E_2}$$



$$\overline{E_1 \cap E_2} = \overline{E_1} \cup \overline{E_2}$$



axioms of provability