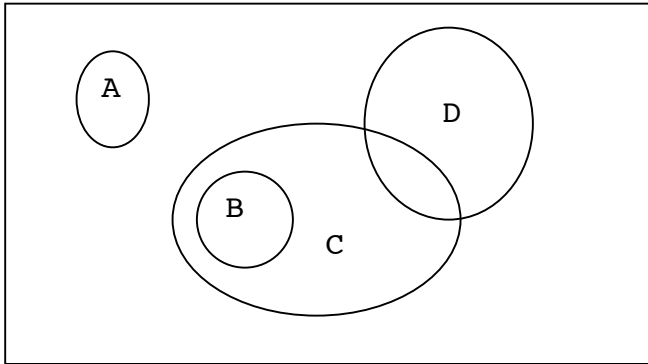


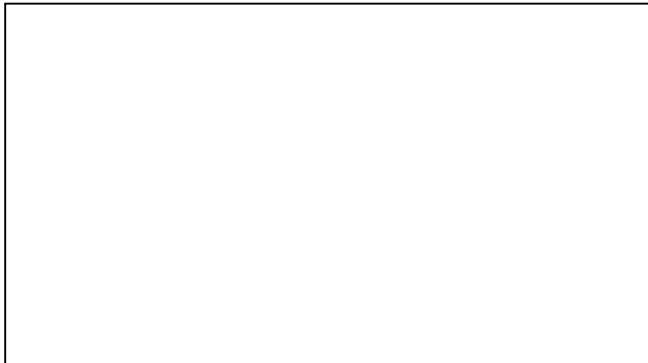
Venn diagrams



- A B
- B C
- C D

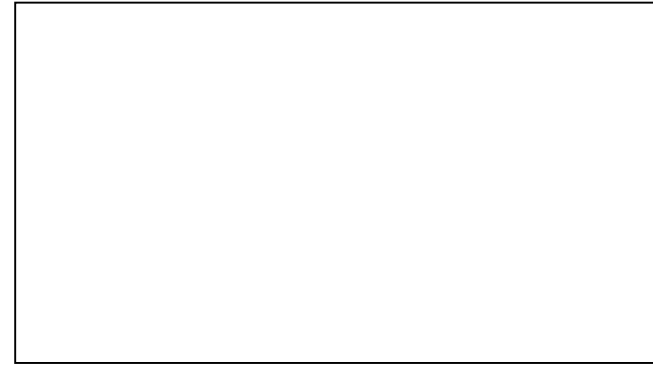
some As are Bs

$$A \cap B \neq \emptyset$$



no As are Bs

$$A \cap B = \emptyset$$



every A is a B

$$A \subseteq B$$



Relations between sets as sets of ordered pairs of sets

- a) $\{ \langle A, B \rangle \mid A \subseteq B \}$
- b) $\{ \langle A, B \rangle \mid A \cap B \neq \emptyset \}$
- c) $\{ \langle A, B \rangle \mid A \cap B = \emptyset \}$