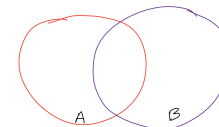
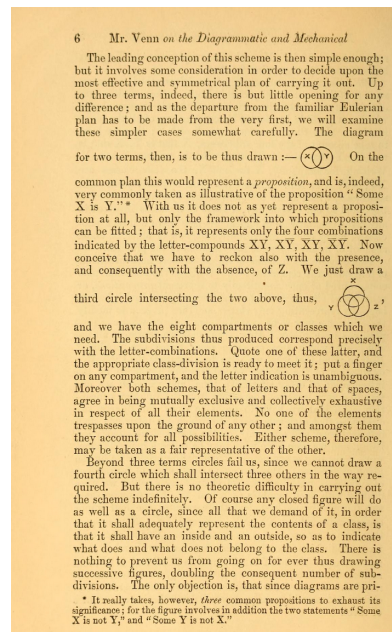
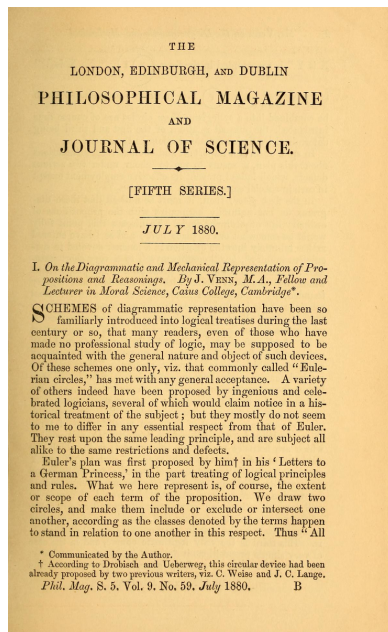


Venn Diagrams

What is a Venn Diagram?

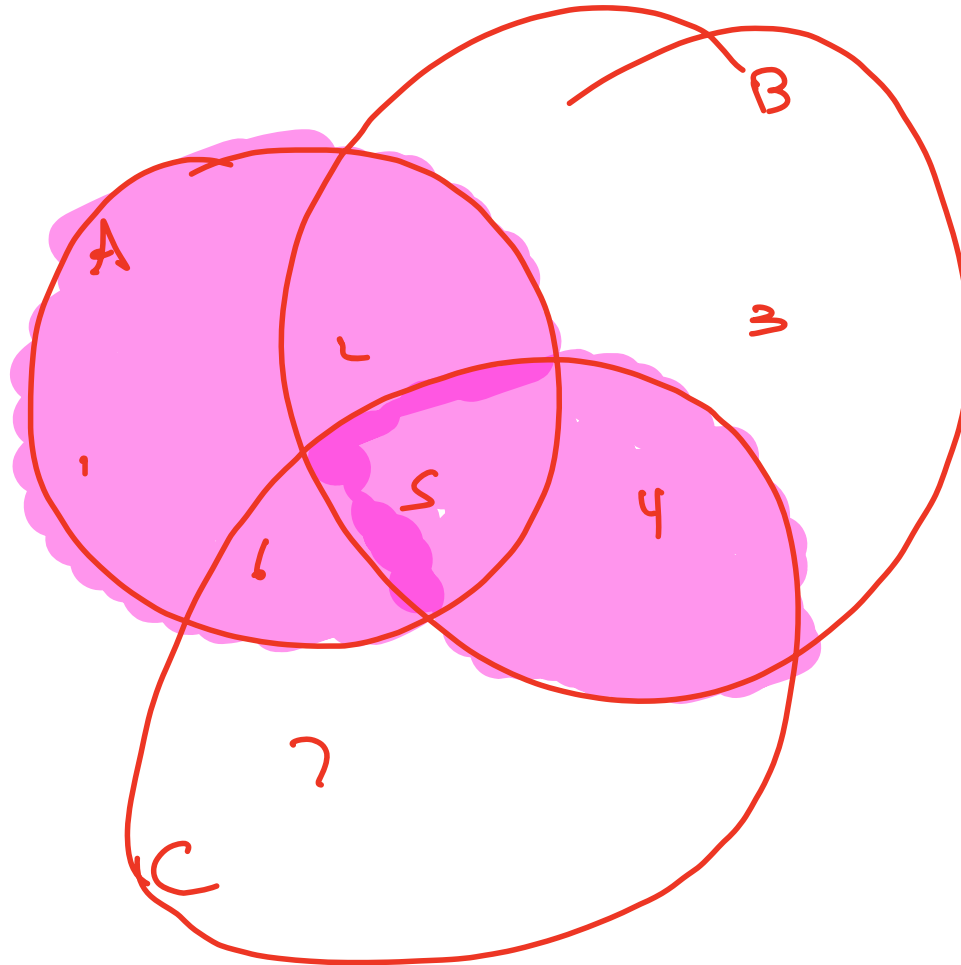
J. Venn M.A. (1880) I. On the diagrammatic and mechanical representation of propositions and reasonings, *The London, Edinburgh, and Dublin Philosophical Magazine and Journal of Science*, 10:59, 1-18, DOI: 10.1080/14786448008626877



Venn Diagrams continued

- ▶ Graphical representation of set operations
- ▶ Convenient as check or for presentation and explanation but (like any diagram) not conclusive without explanation.

$$A \cup (B \cap C)$$



$$A \cup (B \cap C)$$

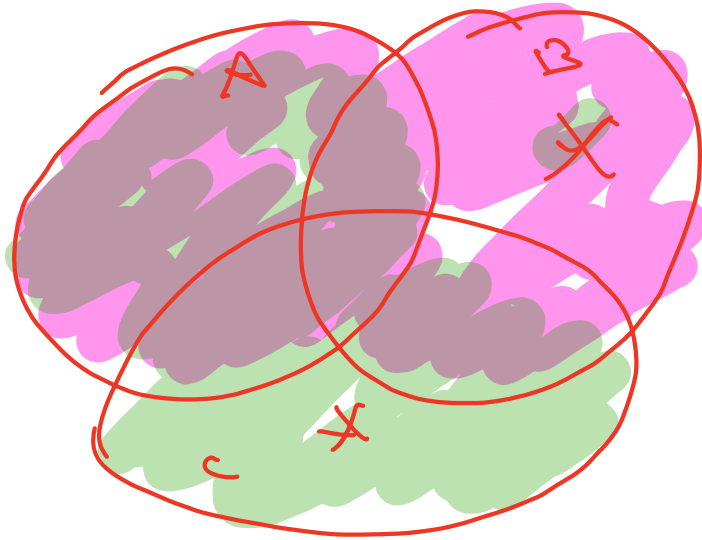
$$(A \cup B) \cap C$$

$$(A \cup B) \cap (A \cup C)$$

$$(A \cup B) \cap (A \cup C)$$

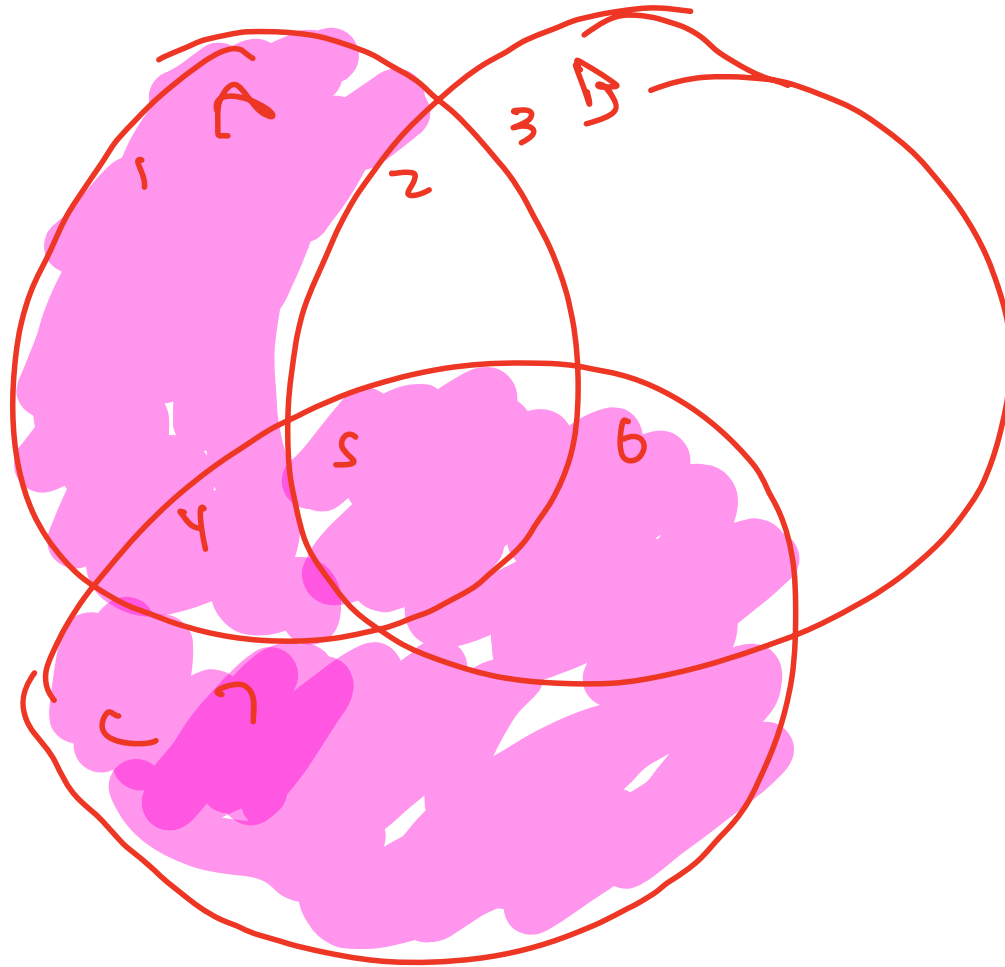
"

$$A \cup (B \cap C)$$



$$(A \cup B) \cap (A \cup C)$$

$$(A - B) \cup C$$



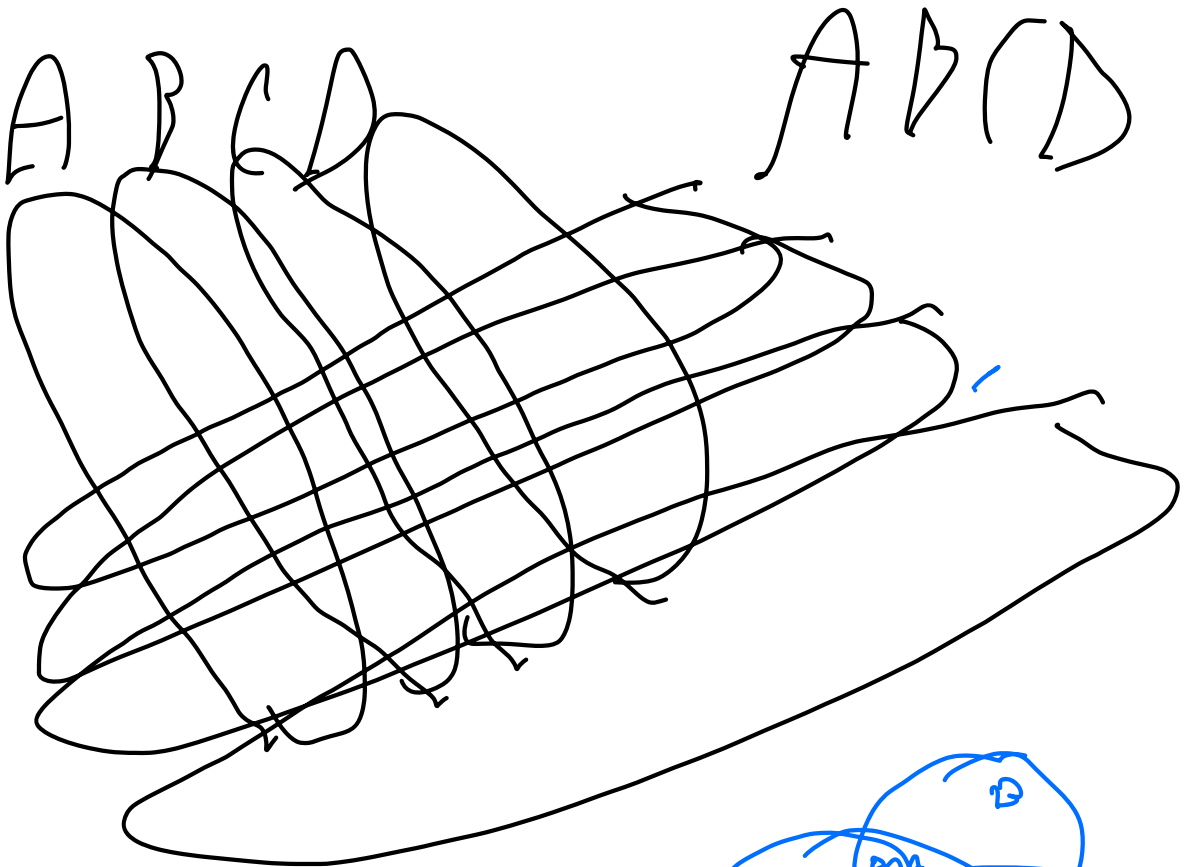
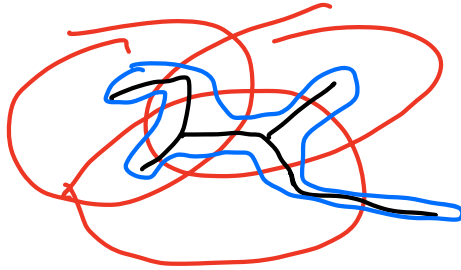
9

A B C D

$A \cap B$ $A \cap C$ $A \cap D$ $B \cap C$

$B \cap D$

$C \cap D$



$A \cap B$

