

FONCTION

GRAPHE

TABLEAU

ALGÈBRE

FRANÇAIS

X, Y deux ensembles

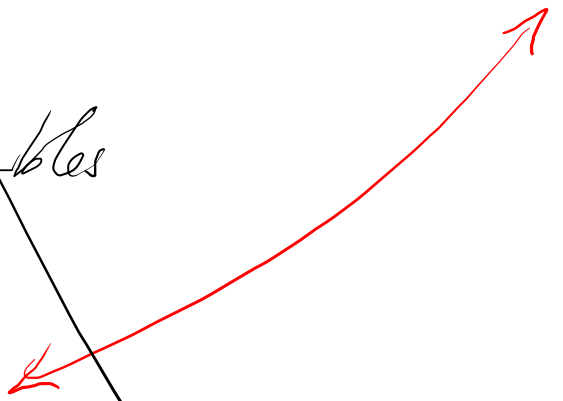
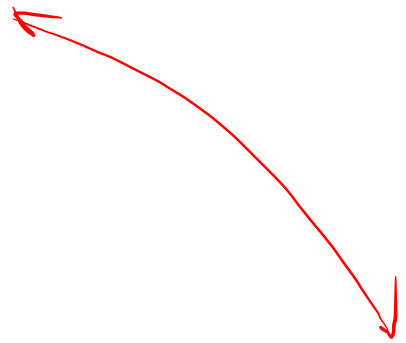
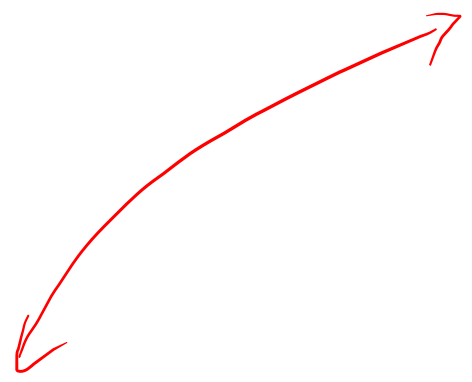
$$X \times Y = \{(x, y) \mid x \in X, y \in Y\}$$

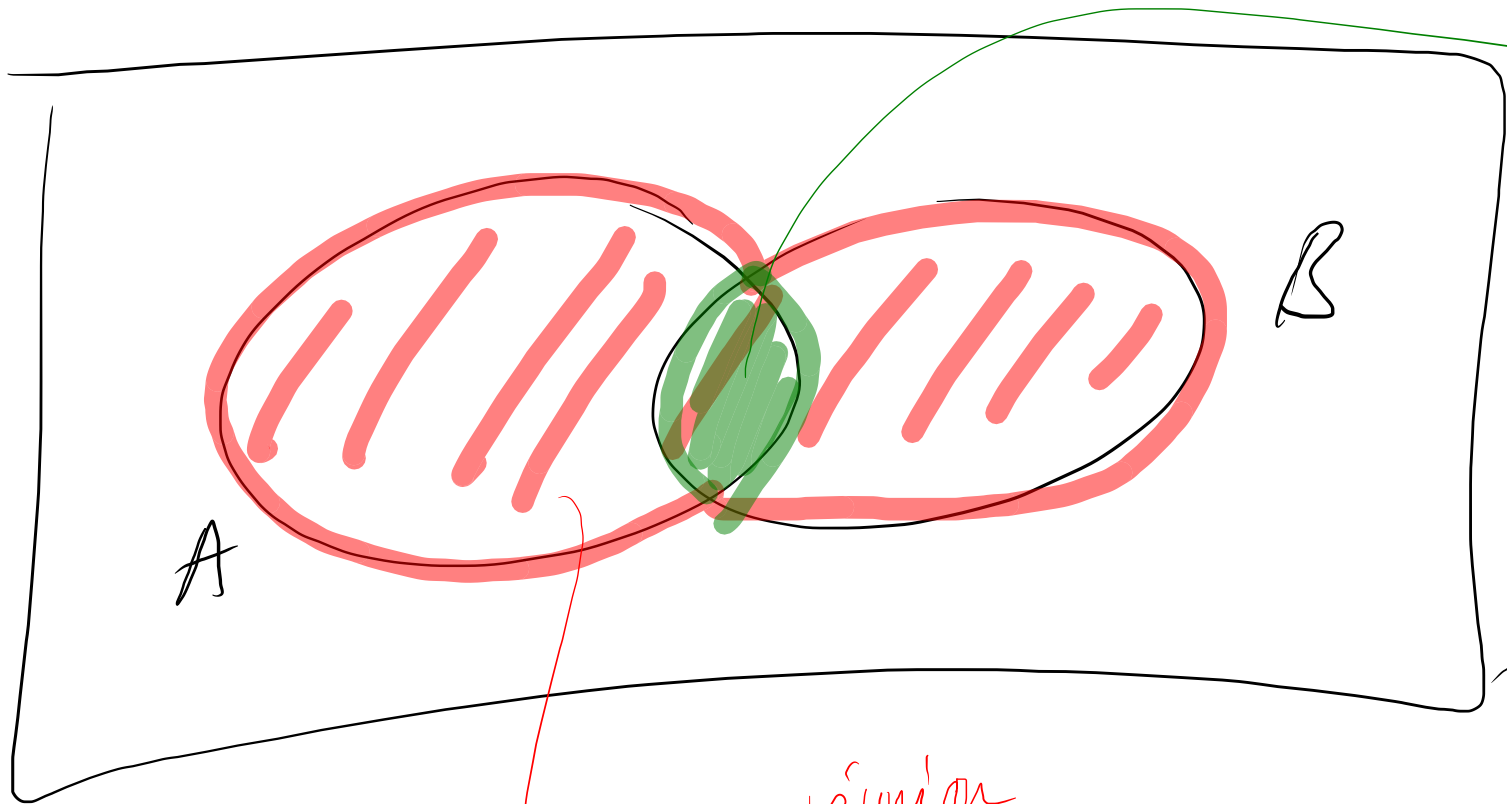
$$\mathbb{R} \times \mathbb{R} = \{(x, y) \mid x, y \in \mathbb{R}\}$$

$$f: F \subset X \times Y$$

$\forall x \in X$ il existe un seul y tq $(x, y) \in F$

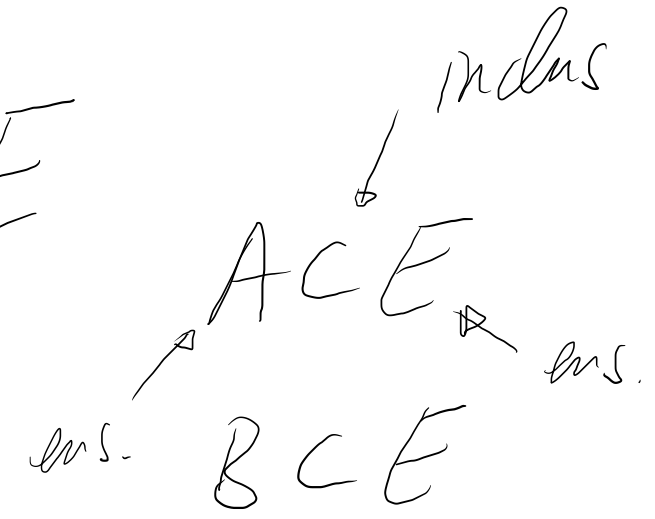
PARTIE D'UN ENSEMBLE



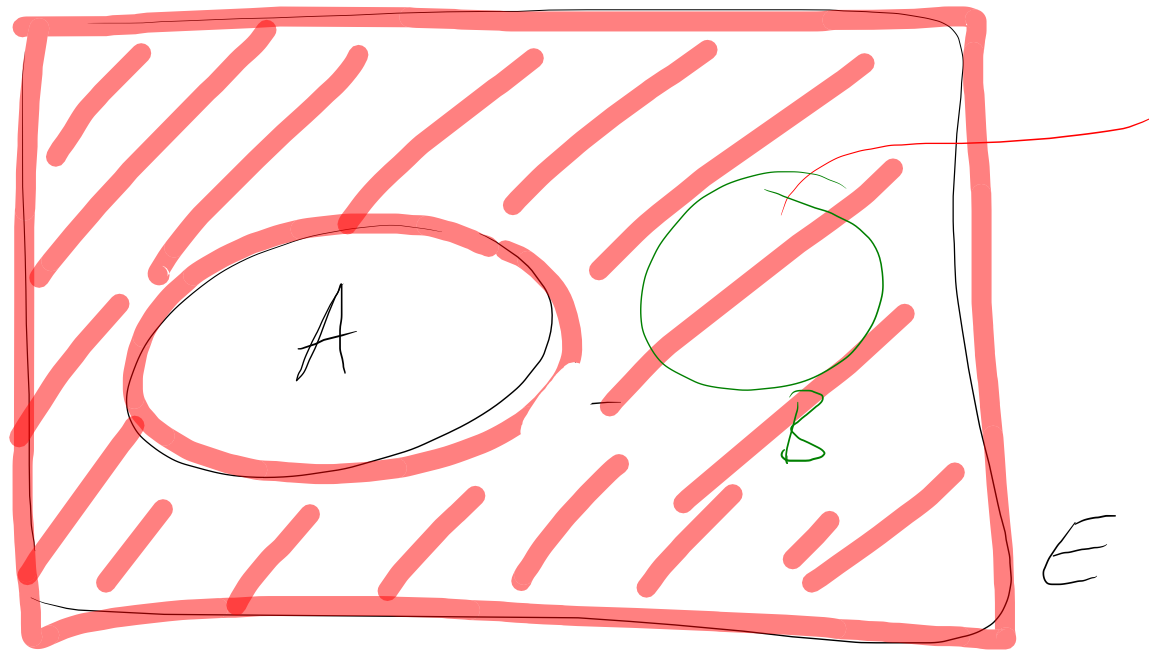


$A \cap B$
 $x \in A$ et $x \in B$

réunion
 $A \cup B$
 $x \in A$ ou $x \in B$



élément
 $1 \in \mathcal{P}$ | $\{1, 2, 3\} \subset \mathcal{P}$
 élém. ens. | ens. ens.



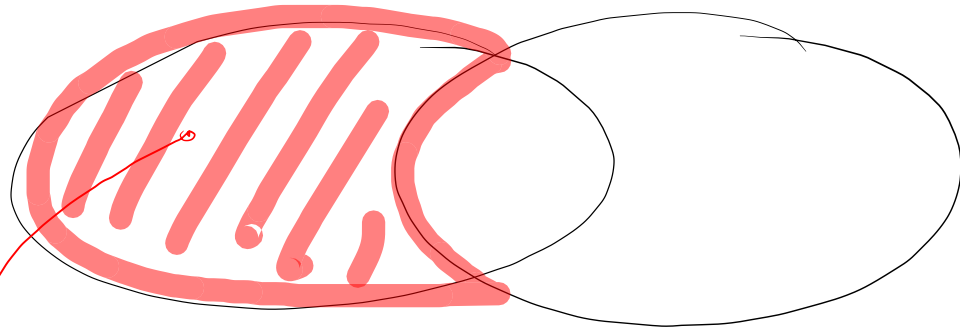
$A \subset E$

$$B \subset C_E A = \bar{A}$$

$C_E A = \bar{A}$ $\leftarrow E$ est défini par le contexte.

$x \in E$ et $x \notin A$

complémentaire



A

B

$A - B$

$x \in A \text{ et } x \notin B$

$C_A(A \cap B)$

$$\mathbb{R} \longrightarrow \mathbb{R}$$

fonction

$$x \longmapsto \frac{1}{x}$$

variable

$$\mathbb{R} \longrightarrow \mathbb{Z}$$

$$x \longmapsto \lfloor x \rfloor$$



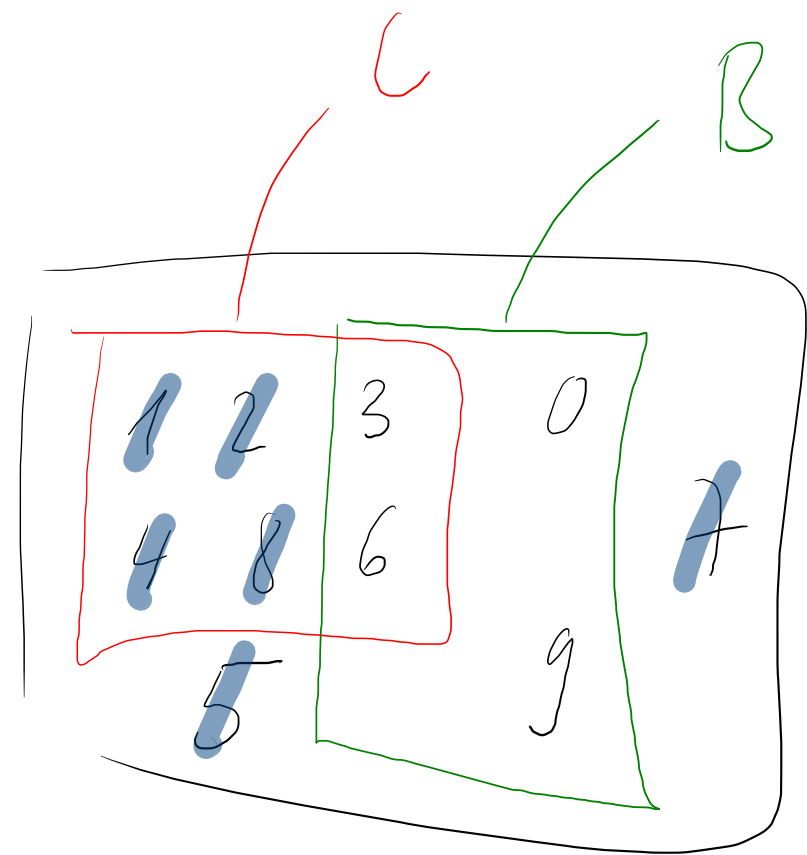
$$\mathbb{N} \longrightarrow \mathbb{R}$$

$$n \longmapsto \sqrt{n}$$

$$A = \{ n \in \mathbb{N} \mid n = 2^k, k \in \mathbb{N} \text{ et } n < 20 \}$$

$$A = \{ 1, 2, 4, 8, 16 \}$$

NOTATION ÉNUMÉRATIVE



C

$$C_A^B = \{1, 2, 4, 5, 7, 8\}$$