

**Formatif task (P):** Show that  $A \cap \emptyset = \emptyset$ .

$$A \cap \emptyset$$

Restart

$$= A \cap (A \cap A^c)$$

Complement with  $\cap$

$$= (A \cap A) \cap A^c$$

Associativity of  $\cap$

$$= A \cap A^c$$

Idempotence of  $\cap$

$$= \emptyset$$

Complement with  $\cap$

Edit