

$F = \{ A \rightarrow BC, CD \rightarrow E, B \rightarrow D, E \rightarrow A \}$

$cdt = cDEAB$ ✓

$$X_F^+ = \{ \dots A \dots \}$$

$$F \models X \rightarrow A$$

$$\models F \models X \rightarrow X_F^+$$

$$\models^r F \models X \rightarrow \text{only } X_F^+$$

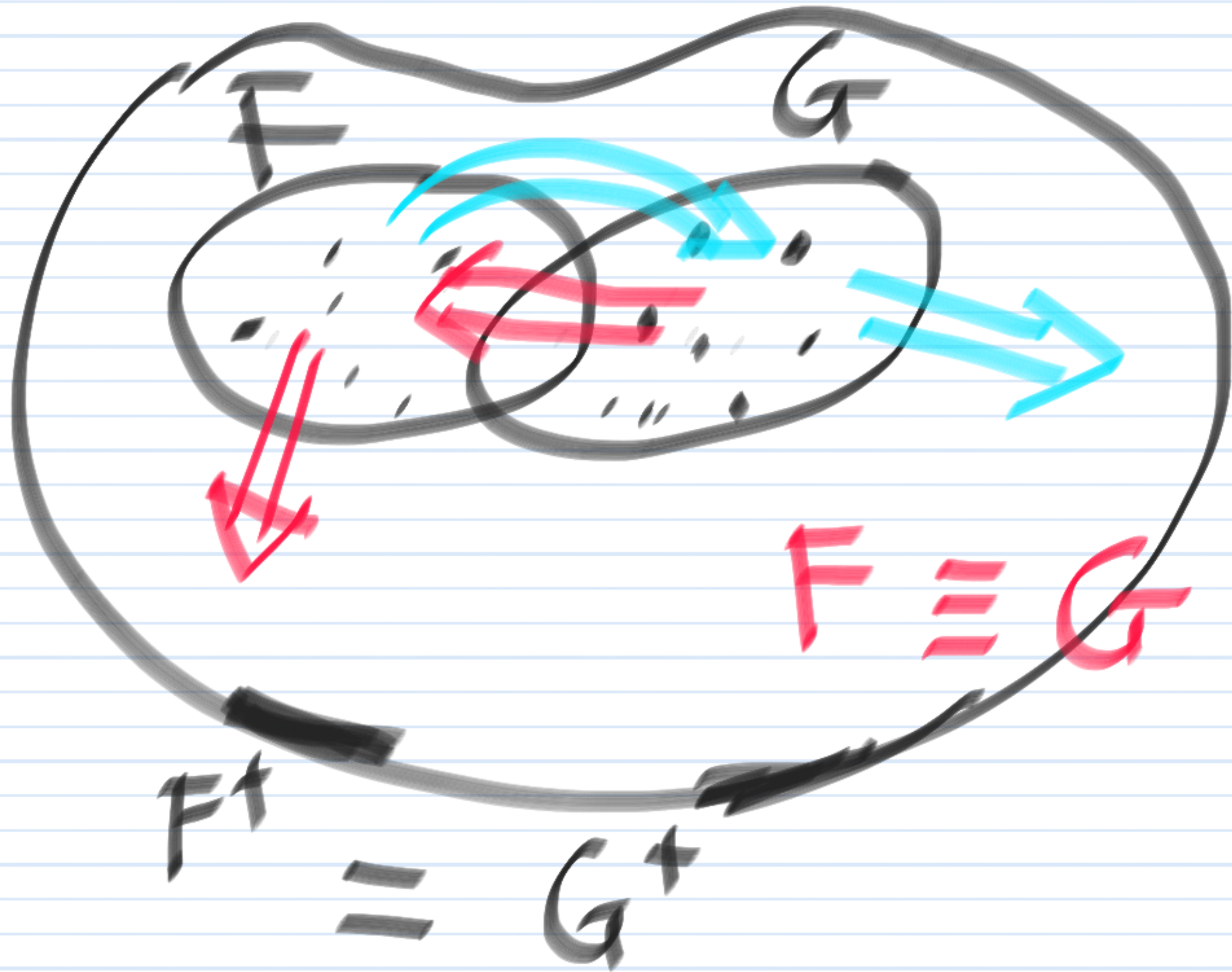
$$F \models X \rightarrow Y$$

ex. $\begin{matrix} \nearrow \\ X \\ \downarrow \\ F \end{matrix}$

$$\{X \rightarrow Y\}$$

st. $Y \models \begin{matrix} \nearrow \\ X \\ \downarrow \\ F \end{matrix} \Rightarrow X \rightarrow Y \quad \checkmark$

yes, lei thi 6.



$$F \equiv G$$

$$st_1 \quad F \models G$$

$$\forall g \in G \mid :: F \models g$$

$$st_2 \quad G \models F$$

$$\forall f \in F \mid :: G \models f$$

$$- F \neq G$$

$$F \equiv G \quad \square$$

