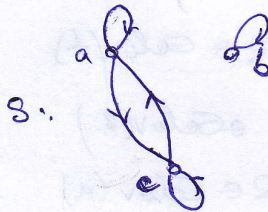
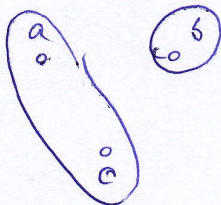
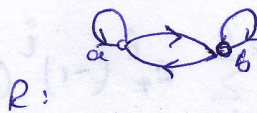
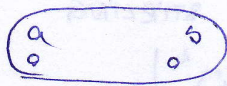


$$\Delta_A \subseteq R \Leftrightarrow \Delta_A^{-1} \subseteq R^{-1} \Leftrightarrow \Delta_A \subseteq R^{-1} \Rightarrow R^{-1} \text{ reflexiva}$$

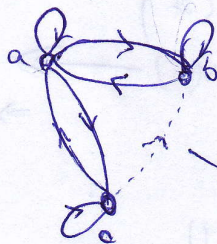
$$(R^{-1})^{-1} = R = R^{-1}$$

$$(R^{-1})^2 \subseteq (R^2)^{-1} \subseteq R^{-1} \Rightarrow R^{-1} \in \text{Echiv}(A)$$

4. Se  $A = \{a, b, c\}$  ( $|A| = 3$ ) e  $R, S \in \text{Echiv}(A)$ :

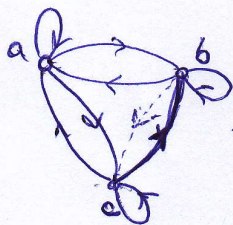


$(c, b) \in R \circ S$   
 $(c, a) \in S \circ R$



nu e tranzitiva

$(b, c) \in R \circ S$   
 $(c, b) \in S \circ R$



nu este simetrica

$$\Delta_A \subseteq S \Rightarrow (R \setminus S) \cap \Delta_A \subseteq (R \setminus S) \cap S = \emptyset \Rightarrow (R \setminus S) \cap \Delta_A = \emptyset \Rightarrow \Delta_A \neq \emptyset \Rightarrow A \neq \emptyset$$

$$\Rightarrow \Delta_A \not\subseteq R \circ S \Rightarrow R \circ S \text{ nu e reflexiva}$$

$$\Downarrow$$

$$R \circ S \notin \text{Echiv}(A)$$

$$(A, R \circ S)$$