

Definition (Properties of endorelations). An endorelation $R \subseteq \mathbf{A} \times \mathbf{A}$ is:

▷ *Symmetric* if for $x, x' \in \mathbf{A}$:

$$\frac{xRx'}{x'Rx}$$

▷ *Reflexive* if $\forall x \in \mathbf{A}: xRx$;

▷ *Transitive* if for $x, x', x'' \in \mathbf{A}$:

$$\frac{xRx' \quad x'Rx''}{xRx''}$$