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Ensemble fonctionnels

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Soient A et B des ensembles.

1 Monotonie

$$\supseteq := (A, B) \mapsto \{f \in B^A, (\forall x, y \in A, x \geq y \implies f(x) \geq f(y))\}$$

$$\supsetneq := (A, B) \mapsto \{f \in B^A, (\forall x, y \in A, x > y \implies f(x) > f(y))\}$$

$$\subseteq := (A, B) \mapsto \{f \in B^A, (\forall x, y \in A, x \leq y \implies f(x) \leq f(y))\}$$

$$\subsetneq := (A, B) \mapsto \{f \in B^A, (\forall x, y \in A, x < y \implies f(x) < f(y))\}$$

2 Parité

$$\vee := (A, B) \mapsto \{f \in B^A, f \circ (-\text{id}) = f\}$$

$$\not\vee := (A, B) \mapsto \{f \in B^A, f \circ (-\text{id}) = -f\}$$

3 Bijectivité

$$\curvearrowright := (A, B) \mapsto \{f \in B^A, \exists f^{-1} \in A^B, f \circ f^{-1} = \text{id}\}$$