

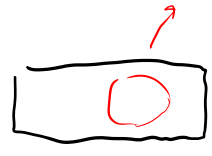
Everyone is happy

NOT someone UNhappy

$$\forall x \in H. G(x)$$

$$\forall x. H(x) \rightarrow G(x)$$

All things, if H are G



Someone is both H and G

$$\exists x. (H(x) \wedge G(x))$$

$$\exists x \in H. G(x)$$

$$\neg \forall x. (H(x) \rightarrow G(x))$$

$$\neg \forall x. \neg (H(x) \wedge G(x))$$

$$\neg \forall x. \neg H(x) \vee \neg G(x)$$

$$\neg \forall x. H(x) \rightarrow \neg G(x)$$

$$\exists x \in H. \underline{\quad}$$

$$\exists x. x \in H \text{ (1) } \underline{\quad}$$

$$G(x) : x \in H$$

pred sol

$$\{ x \mid H(x) \}$$

$$\forall x \in H. \underline{\quad}$$

$$\forall x. x \in H \text{ (2) } \underline{\quad}$$