

Esercizi:

Negare i seguenti enunciati:

- ① $\forall x \in A \exists y \in B P(x, y)$
 - ② $\exists x \in A \forall y \in B (Q(x) \Rightarrow R(y))$
 - ③ $\forall x (P(x) \vee Q(x))$
 - ④ $\forall x \in \mathbb{R} (x \neq 0 \Rightarrow \exists y (xy = 1))$
 - ⑤ $\exists x (P(x) \wedge \forall y (Q(y) \Rightarrow R(x, y)))$
 - ⑥ $\forall x \in A (\exists! y \in B R(x, y))$
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Siano $A = \{\{1, 1\}, \emptyset\}$, $B = \{\{1\}, \emptyset\}$

Indica quali affermazioni sono vere:

$\{1\} \in A$, $\{1\} \subseteq A$, $\emptyset \in A$, $\emptyset \subseteq A$

$\{\emptyset\} \in B$, $\{\emptyset\} \subseteq B$, $\{1, \emptyset\} \subseteq A$

$\{1, \emptyset\} \in A$

Elenca : $\mathcal{P}(\{1,2,3\})$, $\mathcal{P}(\emptyset)$, $\mathcal{P}(\{ \emptyset \})$

Mostra che se $A \subseteq B$, allora $\mathcal{P}(A) \subseteq \mathcal{P}(B)$

S'ano $A = \{x \in \mathbb{Z} \mid x = 3k\}$

$$B = \{x \in \mathbb{Z} \mid x = 6k\}$$

Verif'w che $B \subseteq A$ e $A \neq B$