9. Stabilisci se le seguenti affermazioni sono vere o false:

$5 \in \{5\}$	Ⓥ Ⓕ	$\{x \in \mathbb{Z} \mid x^2 \leq 0\} = \emptyset$	Ⓥ Ⓕ	$\emptyset \in \{\emptyset\}$	Ⓥ Ⓕ
$\{5\} \in \{5,6\}$	Ⓥ Ⓕ	$\{x \in \mathbb{N} \mid 3 < x < 4\} = \emptyset$	Ⓥ Ⓕ	$0 \in \emptyset$	Ⓥ Ⓕ
$54 \in \{2n \mid n \in \mathbb{N}\}$	Ⓥ Ⓕ	$\{\emptyset\} = \emptyset$	Ⓥ Ⓕ	$\{0\} \subset \{0,5\}$	Ⓥ Ⓕ
$\frac{3}{2} \in \{x \in \mathbb{Z} \mid 0 < x < 2\}$	Ⓥ Ⓕ	$\emptyset = \{0\}$	Ⓥ Ⓕ	$\emptyset \subseteq \{\emptyset\}$	Ⓥ Ⓕ

Considera gli insiemi $A = \{m; n; p; q; r\}$, $B = \{m; n; r; s\}$, $C = \{p; q; s\}$.

$C = A - B$	Ⓥ Ⓕ	$C = (A \cup B) - (A \cap B)$	Ⓥ Ⓕ
$C = A - (A \cap B)$	Ⓥ Ⓕ	$C = B - (A \cap B)$	Ⓥ Ⓕ
$A - B = A - (A \cap B)$	Ⓥ Ⓕ	$[A - (A \cap B)] \cup [B - (A \cap B)] = C$	Ⓥ Ⓕ

Considera gli insiemi $A = \{x \in \mathbb{N} \mid 1 < x \leq 6\}$ e $B = \{x \in \mathbb{N} \mid 2x \leq 6\}$:

$1 \in A$	Ⓥ Ⓕ	$B \subset A$	Ⓥ Ⓕ	$A \cup B = \{x \in \mathbb{N} \mid 1 \leq x \leq 6\}$	Ⓥ Ⓕ
$\{2; 4; 6\} \subset A$	Ⓥ Ⓕ	$A \cup B = A$	Ⓥ Ⓕ	$A - B = \{2; 5; 6\}$	Ⓥ Ⓕ

10. Siano dati gli insiemi $A = \{1; 2; 6; 7; 10; 11; 15\}$, $B = \{2; 3; 4; 8; 11; 12; 13\}$ e $C = \{4; 5; 6; 9; 13; 14; 15\}$, completa:

$(A \cup B) \cap C = \{4; 6; 13; 15\}$ $(A \cup C) \cap B = \{2; 4; 11; 13\}$ $A \cap B \cap C = \emptyset$

$A - (B \cup C) = \{1; 7; 10\}$ $A - B = \{1; 6; 7; 10; 15\}$ $B - (A \cup C) = \{3; 8; 12\}$

11. Siano $A = \{x \in \mathbb{N} \mid 4 \leq x^2 < 25\}$ e $B = \left\{x \in \mathbb{N} \mid x = \frac{2n+2}{n-1}, n \in \{3; 5\}\right\}$. Determina:

$A = \{2; 3; 4\}$ $B = \{3; 4\}$

$A \cup B = \{2; 3; 4\}$ $A \cap B = \{3; 4\}$ $A - B = \{2\}$ $B - A = \emptyset$