

Set Notations

A) If $V = \{-10, -6, \{-5\}, 42, 19, \{1\}, 26\}$, and $W = \{-11, \{88\}, 28, -7, 52, \{16\}, 14\}$, fill in each blank with the correct set notation symbol (\in , \notin , \subseteq , or $\not\subseteq$).

1) -6 _____ V

2) $\{-7\}$ _____ W

3) $\{52, 42\}$ _____ W

4) 14 _____ V

5) 28 _____ V

6) $\{88\}$ _____ W

B) If $A = \{x, \{g\}, \{7\}, 8, \{9\}\}$, $B = \{s, \{11\}, 13, \{14\}, 25\}$, and $C = \{3, \{6\}, w, 21\}$, state whether each of the following statements is true or false.

1) $25 \in C$ _____

2) $\{\{9\}, 13\} \subseteq A$ _____

3) $\{\{14\}, \{11\}\} \subseteq B$ _____

4) $\{\{g\}\} \not\subseteq C$ _____

5) $\{x\} \not\subseteq A$ _____

6) $w \notin B$ _____

C) If $E = \{-1, -8, 5, 3\}$, $F = \{2, 71, 90, 34\}$, $G = \{33, 26, 50, 64\}$, and $H = \{62, 75, 17, 32, 35\}$, answer the following questions.

1) Which of the following is true?

a) $\{5\} \subseteq E$

b) $\{17, 71\} \subset H$

c) $64 \in F$

2) Which of the following is false?

a) $\{33\} \not\subseteq F$

b) $71 \in H$

c) $\{50, 33\} \subseteq G$