

Set Language & Notation

Given the following defined sets:

- $S = \{2, 4, 6, 8\}$
- $V = \{a, e, i, o, u\}$
- $M = \{\text{Months with 32 days}\}$

1. Write set S in word description form:

2. Complete each statement by writing the symbol $\in$ or $\notin$ in the blank:

a) 4 S $\in$ $\notin$

b) 5 S $\in$ $\notin$

c) e V $\in$ $\notin$

d) b V $\in$ $\notin$

State whether each mathematical statement is True or False:

5. $\{\} = \emptyset$

6. $7 \in \{1, 3, 5, 9\}$

7. $x \notin \{a, b, c\}$

8. $\{\emptyset\}$ is the exact same thing as $\{\}$ or $\emptyset$.

10. Error Analysis:

A student wrote the following statement: $p \in \{q, r, s\}$

Explain why this statement is incorrect and rewrite it so that it is mathematically correct:

Explanation:

Correction: