Practice quiz on Sets

TOTAL POINTS 3

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1. Let $A = \{1, 3, 5\}$. Is the following statement: $3 \in A$. True or false?

1 / 1 point

○ False

◉ True

✓ **Correct**

The symbol $\in$ stands for "is an element of" and it is true that 3 is an element of A. The other two elements of A are 1 and 5.

2. Let $E = \{-1, -2, -3\}$. Compute the cardinality $|E|$ of E:

1 / 1 point

○ -3

○ 0

○ E

◉ 3

✓ **Correct**

Recall that the cardinality of a set is the number of elements in it. Since E has three elements (which are ?1, ?2, ?3), the cardinality of E is $|E| = 3$.

3. Let $A = \{1, 3, 5\}$ and $B = \{3, 5, 10, 11, 14\}$.

1 / 1 point

Which of the following sets is equal to the intersection $A \cap B$?

○ $\{1, 3, 5\}$

○ $\{3\}$

○ $\{3, 5, 10\}$

◉ $\{3, 5\}$

✓ **Correct**

The intersection of two sets consists precisely of the elements they share in common. The elements 3 and 5 are in both A and B.