

Concept Check: Interpretations of "unique"

Below are two sentences, one spoken in colloquial English, and the other in a mathematical context. What does the sentence mean in the context in which it is spoken?

1. "At the Halloween party, everyone wore a unique hat!"

- a) Everyone wore a hat, and no two people wore hats that looked the same.
- b) Each person wore exactly one hat.

2. "For a function $f:A \rightarrow B$, every element of A has a unique output in B ."

- a) Every $x \in A$ has an output in B , and no two elements of A have outputs with the same value.
- b) Each $x \in A$ has exactly one output in B .

Conclusion:

In mathematics, the word "**unique**" means _____ .

