

Questions

Note: This tool needs your expertise to be excellent. Double-check Khanmigo's accuracy and ensure wording is appropriate for any sensitive topics.

1. What is a set in mathematics?
2. Give an example of a set from everyday life.
3. Who developed the theory of sets, and what was he working on when he first encountered sets?
4. List three special sets used in mathematics and describe what each set contains.
5. Explain what it means when we say "a belongs to A" and write the correct mathematical symbol for it.
6. Describe the roster form of representing a set and give an example using even positive integers less than 7.
7. Why is the collection of the five most renowned mathematicians of the world not considered a set?

Answer key

Note: This answer key may contain mistakes. Please check for accuracy

1. A set is a well-defined collection of objects.
2. A pack of cards is an example of a set from everyday life.
3. Georg Cantor, a German mathematician, developed the theory of sets while working on problems involving trigonometric series.
4. N is the set of all natural numbers, Z is the set of all integers, and Q is the set of all rational numbers.
5. It means that an element is part of a set. The correct symbol is $\in$.
6. In roster form, all elements are listed inside braces and separated by commas. For example: $\{2, 4, 6\}$.
7. It is not considered a set because the collection is not well-defined; people may have different opinions about who the most renowned mathematicians are.