Answer on Question #80367 – Math – Abstract Algebra

Question

$\{\alpha_1, \alpha_2, \dots, \alpha_n\}$ is a set only if all the α_i follow a given rule. Is this statement TRUE or FALSE? Give a reason for your answer.

Solution

False. A set can be defined in different ways. A set is not always defined by a rule. On the other hand, if a set is defined by a list of objects, a rule can be introduced and the set can be redefined. Objects $\alpha_1, \alpha_2, \dots, \alpha_n$ can be thought as rule variables or as list elements.
The correct reason varies according to how sets are introduced and how $\alpha_1, \alpha_2, \dots, \alpha_n$ are named.

Answer: False.