## Answer on Question \#78775 - Math - Abstract Algebra Question

If $\sigma$ is an even permutation, then $\sigma^{2}=\mathrm{I}$.
State the given statement is true or false, give reasons for your answer.

## Solution

It is False.
The permutation (123) is even, but (123) squared is equal to (132) and not to an identity permutation.

