

In a round robin tournament there were $n \geq 2$ players. Each player played once against every other player and there were no ties. Define a player P to be a “Winner” if P satisfies the following property:

For any other player Q , either P beat Q or P beat someone who beat Q .

It not hard to see that a tournament can have more than one Winner; examples are easy to construct. Prove, however, that no tournament can have *exactly* two winners.

Hint: For the Sept. 24 Problem of the Week we showed that every tournament has *at least* one winner. You may use this fact.