



# Problem of the Week

## Problem E

### Every Vote Counts!

Just a small change in how people vote can affect an election result.

In a recent election, the ratio of the number of voters for the Purple Party to the number of voters for the Pink Party was 15:16 and the Pink Party won the election. Had 300 more people voted for the Purple Party and 200 fewer people voted for the Pink Party, the ratio would have been 11:10 and the Purple Party would have won the election.

Determine the total number of votes originally cast.

