

STEP III, 2008 Q13 EC

Q13 About a ninth tried this. Apart from those who had no idea, there were three categories of attempt. The first group obtained the first result but did not spot that regardless of what happens in the first step, immediately after it there are $2n - 2$ free ends. The second group safely navigated the results for the general case but could not see how to apply the approximation to obtain the result in the specific case, and the final group had the satisfaction of finding the result. Most fell into the first category, with fewer in the second, and a small number in the third.



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