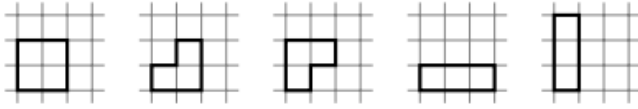


Task

Prove that the number of pairs of paths of length $2n + 2$ starting at $(0, 0)$, ending at the same point, having no other common points and going only up and to the right is equal to c_n .

**Solution**