

Puzzle of the Week

Counting Steps

When climbing steps, some people like to take the steps two at a time, at least part of the time. That leads to the general question of how many different ways there are of going up steps this way.

THE CHALLENGE: How many different ways are there of going up 10 steps where you are making some combination of single and double steps along the way (it may be all single steps or all double steps or some mixture)? How about 20 steps?



EXPLORATION: Do you see a pattern you recognize? Can you find a shortcut that will make it easier to count all the ways of doing this?