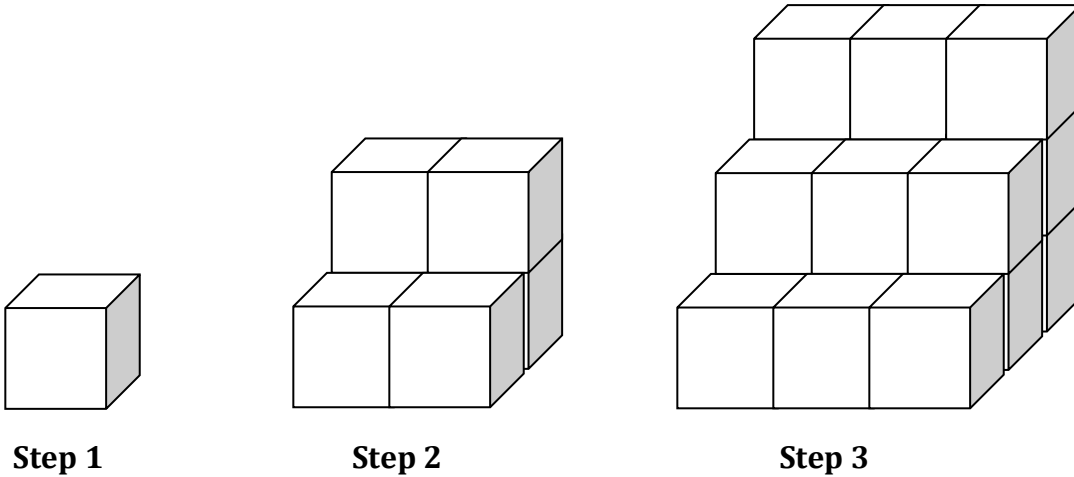


Growing Staircases

Level E



Consider this set of staircases. The first staircase has one step, the second staircase has two steps, and the third staircase has three steps. Assuming the pattern continues, find a general (closed) formula to find the number of blocks needed to build a staircase with n steps.

Justify why your formula works.

Explain and justify which stages will require an odd number of blocks to build.

