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Inside Problem Solving

Growing Staircases

Level C



This is a staircase that has three steps. Think about a staircase that follows the same pattern, but has one hundred steps. How many blocks are needed to make just the one-hundredth step? Explain how you know.

Write a rule to find the number of blocks needed for the nth step in a staircase that has n steps. Explain your rule.

Write a rule to find the total number of blocks needed to make a staircase that has n steps. Explain your rule.

Write a rule that, given any number of blocks, y, you can use to determine how many steps are in the staircase. Explain your rule.

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