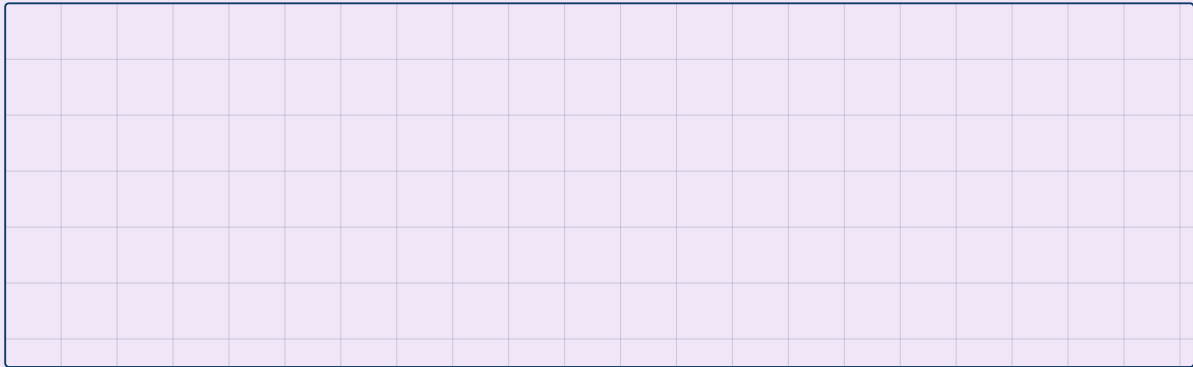


NEXT STEP OF THE 1, 2, 3 STAIRCASE

- 1 Look at the towers already built: 1 square, then 2 squares, then 3 squares.
- 2 Each tower is one square taller than the last, so the growing rule is +1.
- 3 Step 4 must follow the same rule: $3 + 1 = 4$.
- 4 Build a tower of 4 squares beside the others to finish the staircase.

WARM-UP

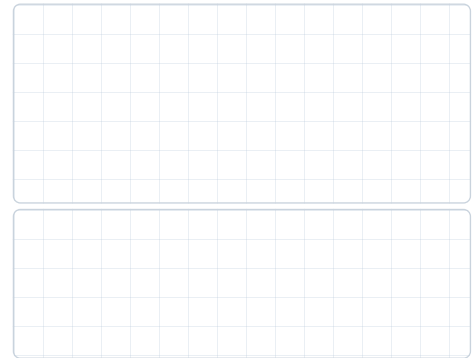
Use the squared paper to draw each growing staircase.



1. Draw a staircase of towers with 1, 2, 3 and 4 squares and write the growing rule beside it.
2. Draw the towers 2, 4, 6 and then the next tower of 8 squares.
3. Draw the towers 3, 6, 9 and the next tower that follows the same growing rule.

PRACTICE

- 1 Sam builds a cube staircase for a model house. The first three towers have 4, 5 and 6 cubes. How many cubes does the next tower need?
- 2 Mia stacks wooden blocks into towers of 10, then 12, then 14. What size is the next tower if the growing rule stays the same?
- 3 On the workshop bench the tower heights are 5, 10 and 15 cubes. What height comes next in this growing staircase?



? ALWAYS, SOMETIMES, NEVER

Always, sometimes or never true? Write A, S or N.

- a. A staircase of towers 1, 2, 3, 4 grows by 1 square at every step. ☐
- b. In a growing staircase the amount added is the same at every step. ☐
- c. A growing staircase can add 2 cubes then 3 cubes on the next step. ☐
- d. A pattern of towers 1, 2, 3, 4 is the same as a repeating red-blue chunk. ☐