

Spatial Patterns - Notes and Steps



Key idea



A spatial pattern is a **picture** pattern.

Count the tiles in each term to turn it into a **number** pattern.

Find the growth



Counts: 3, 5, 7, 9

Each term adds 2 tiles, so the pattern grows by $+2$ — a constant step.

Common mistake

Count the tiles the **same way** in every term.

A different count each time gives the wrong number pattern.



Predicting a Later Term



Key idea

For a constant step:
term = first term + (steps taken)
× common difference.

Example

3, 5, 7, 9: first term 3, step +2.
Pattern 8 is 7 steps on: $3 + 7 \times 2 = 17$ tiles.

Common mistake

If the differences change, the growth is **not** constant.
1, 3, 6, 10 adds +2, +3, +4 — you cannot use one step here.



= **copy this into your book.** Boxes without a pencil are just to read.