

Mathematics

Expressions, equations and inequalities

Growing tree patterns

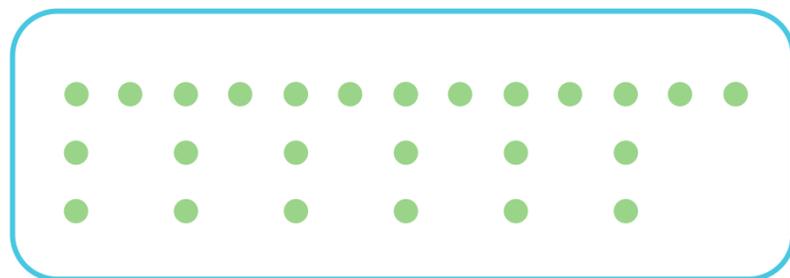
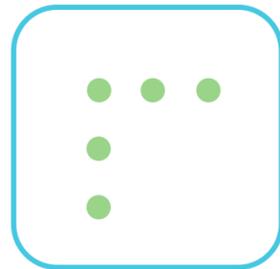
Independent Task

Ms Jones

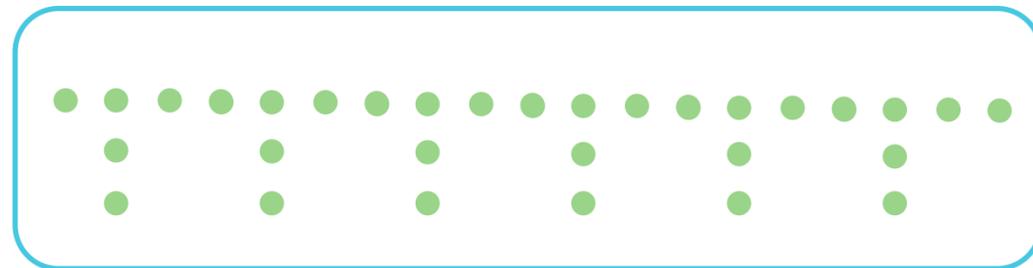
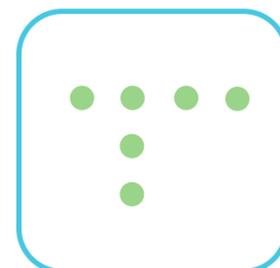


Try This

You can make different chains by changing the repeating pattern and overlapping them in a row formation.



How many dots are in each of these 6-chains?

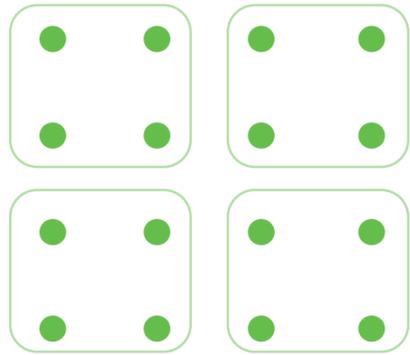


Create your own 6-chain. How many dots are there?

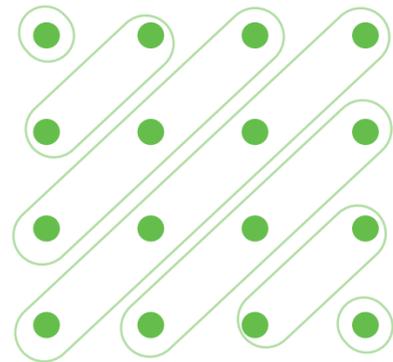


Independent task

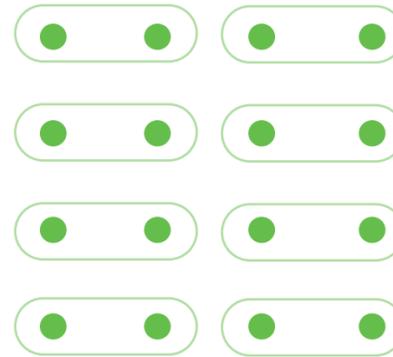
1. Match the grouping strategy to the tracking calculation:



$$8 \times 2$$

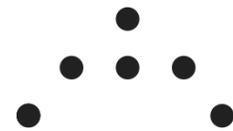


$$4 \times 2^2$$

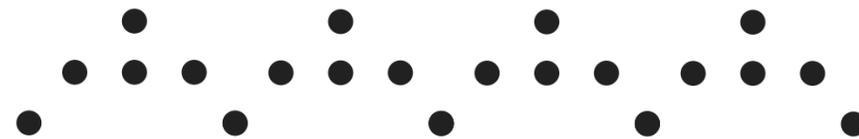


$$1 + 2 + 3 + 4 + 3 + 2 + 1$$

2. Chains are made using the pattern:



Here is an example of a 4-chain:



Calculate the number of dots in a **100-chain**.

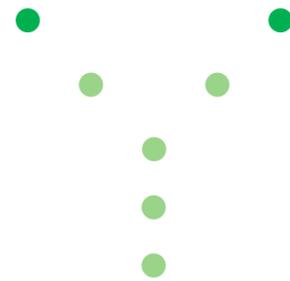


Explore

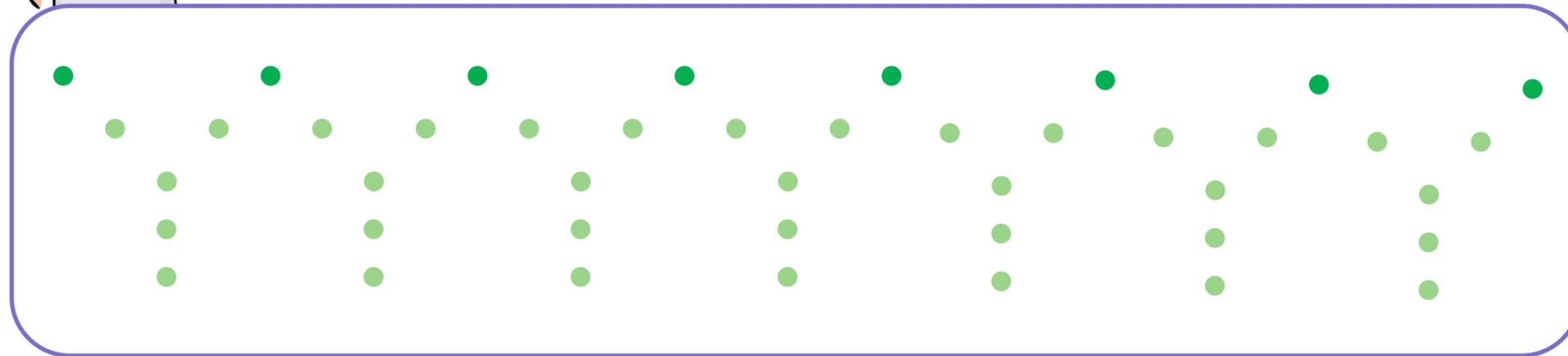
Cala has used a different tree to create a 7-chain.



I also added two extra dots to the original tree.



How could you count the dots?



What happens when you vary the length of the chain?
What if you vary the number of dots added?

