

Ebo

Olivia

Pattern 1

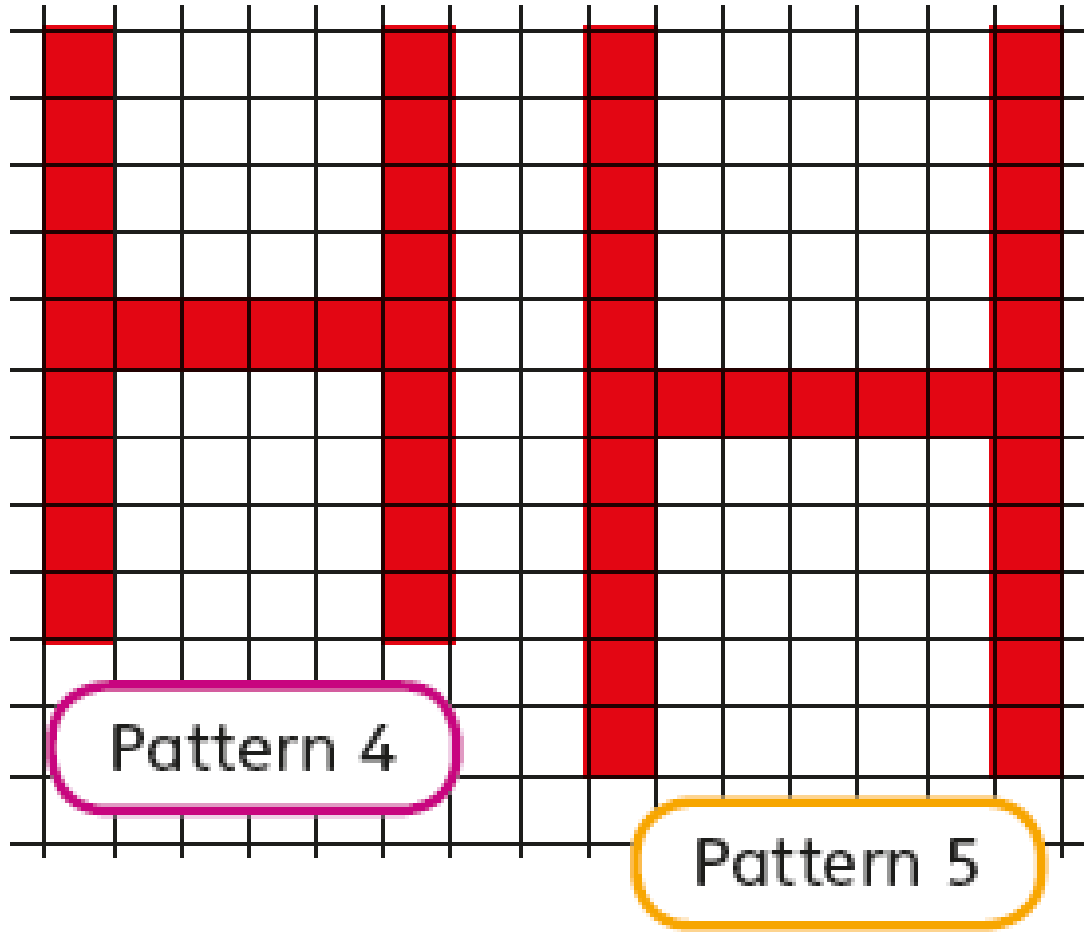
Pattern 2

Pattern 3

How many tiles will Olivia and Ebo need to make pattern number 5?

Another pattern has 42 tiles. Which pattern number is this?

a)

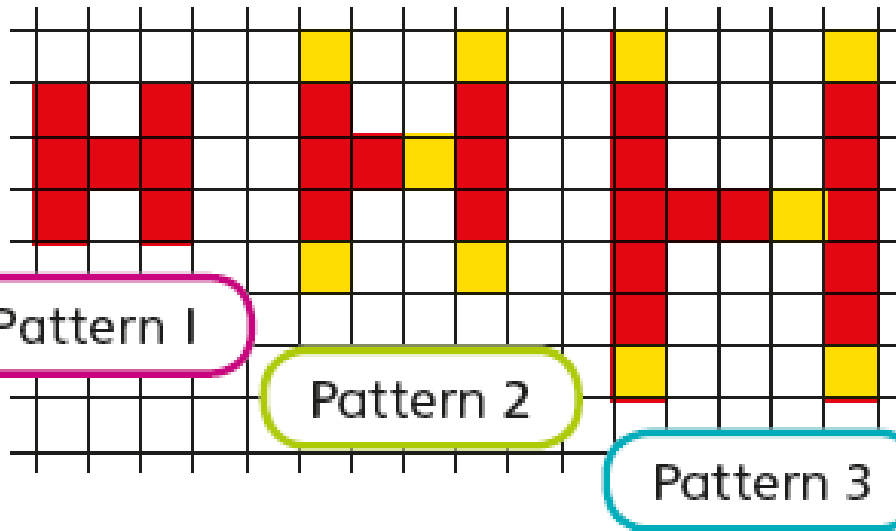


I drew pattern 4
and pattern 5.



Olivia and Ebo will need 27 tiles to make pattern number 5.

b)

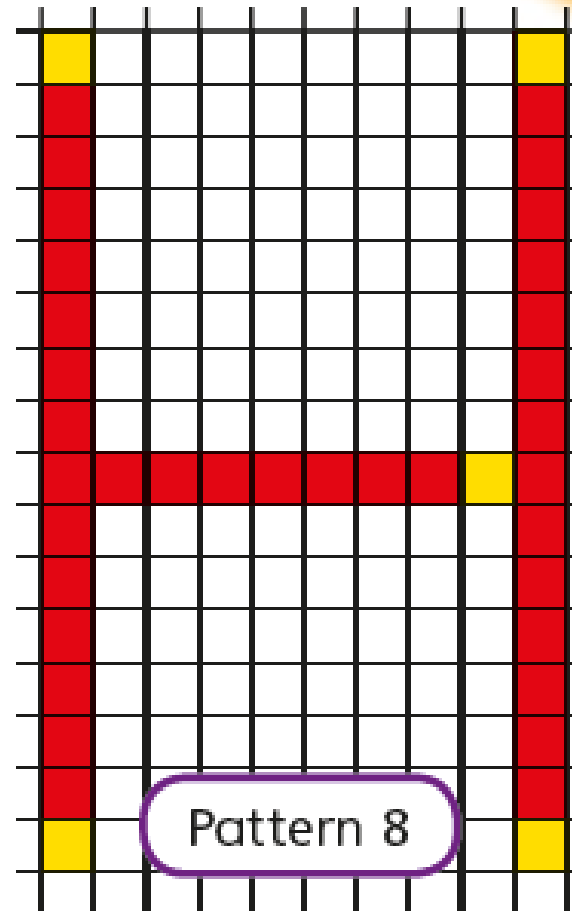


I noticed that the number of tiles increased by 5 each time. I kept adding on 5 until I got to 42.

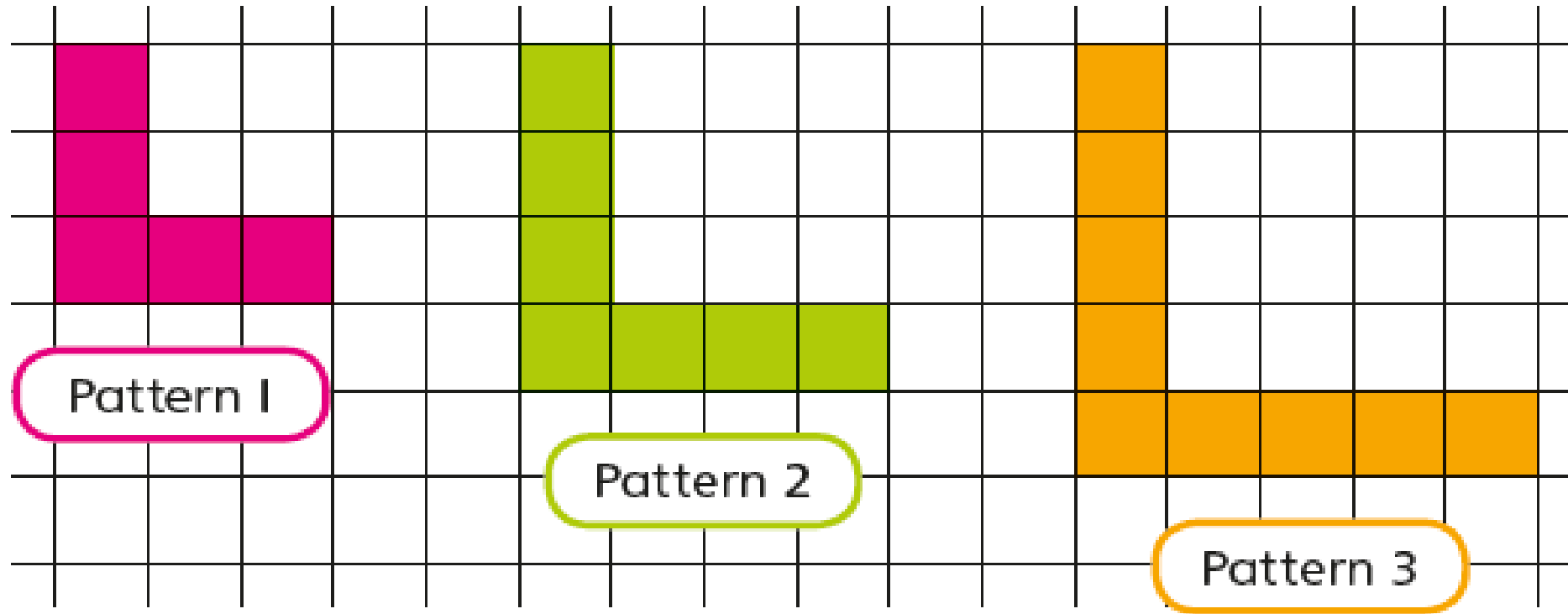
Pattern	1	2	3	4	5	6	7	8
Number of tiles	7	12	17	22	27	32	37	42



Pattern number 8 has 42 tiles.



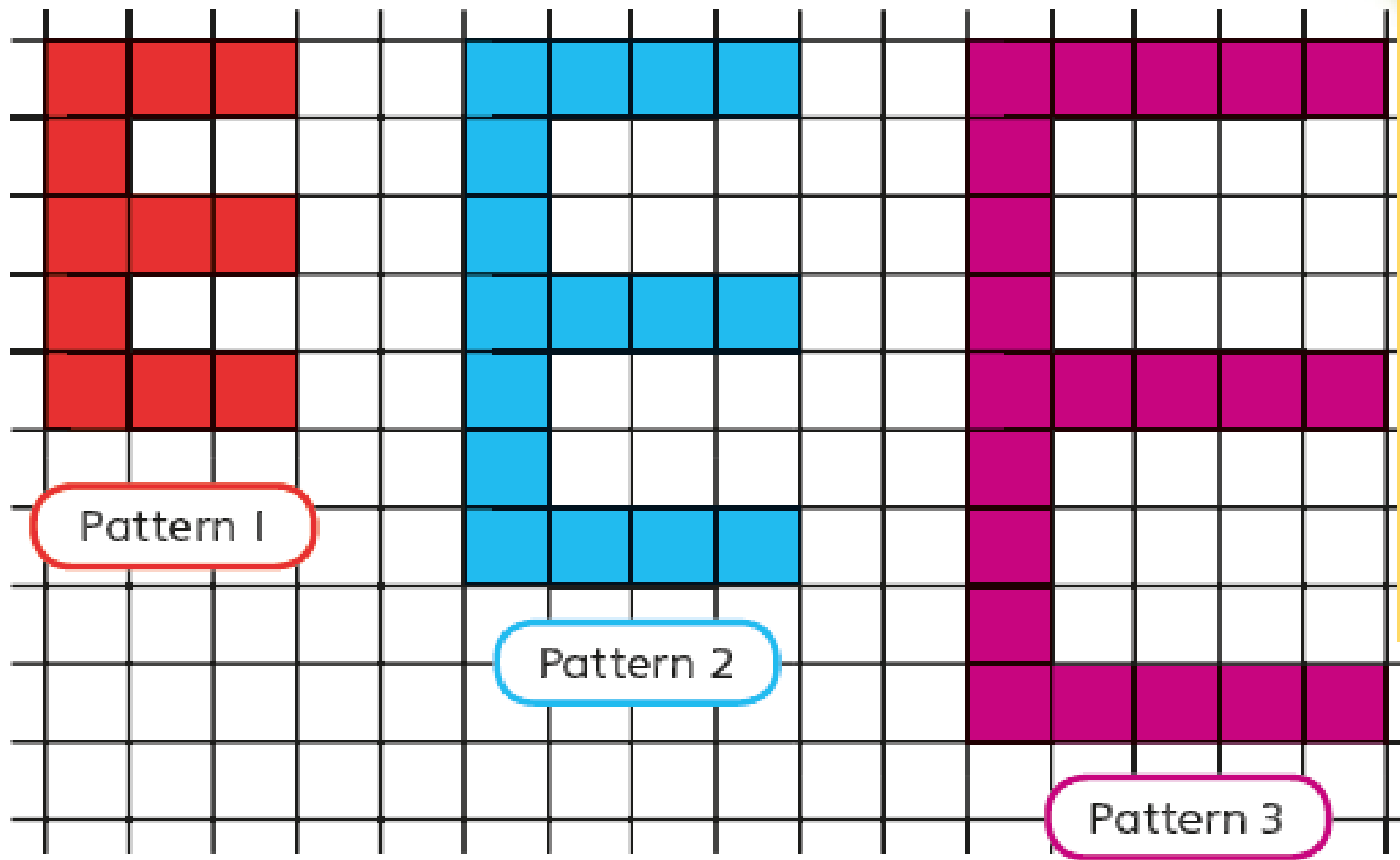
Here are some different tiling patterns.



- a) How many tiles are needed to make pattern number 5?
- b) Which pattern needs 15 tiles? Complete the table to help you.

Pattern	1	2	3	4	5			
Number of tiles								

Look at this sequence of tiling patterns.



What is the way to work out the sequence?

- Count the tiles in each pattern
- Look for the difference between each pattern
- Is it an equal number?
- Continue the sequence by adding carefully.

Would a table of results help?

Which number pattern will be the first to have more than 50 tiles?

a) Isla starts with 70,000 points.



I noticed that I was counting up and down in 10,000s.



When Isla reaches the finish her score is 120,000.

Jewel Hunt



Reena takes the star path. She starts on 230,000 points.

Level 10

Reena: 230,000

Isla: 70,000

What score does Reena have when she reaches the finish?



b) Reena starts with 230,000 points.



I made 230,000 from counters and added and removed counters as I went. Sometimes I had to exchange.



230,100

231,100

231,090

232,090

231,990

231,980

241,980

When Reena reaches the finish her score is 241,980.

Work out the missing numbers in each sequence.

a) , , , , ,

b) , , , , ,

c) , , , , ,

Liam makes a sequence of numbers starting with 300

He subtracts 125 each time.

Write the next two numbers in Liam's sequence.



300

175

50

The numbers in this sequence increase by 7 each time.

1 8 15 22 29

The sequence continues in the same way.

Will the number 777 be in the sequence?
Circle **Yes** or **No**.



Yes / No

Explain how you know.