

Mathematics

Solving Linear Simultaneous Equations Graphically

Linear relationships

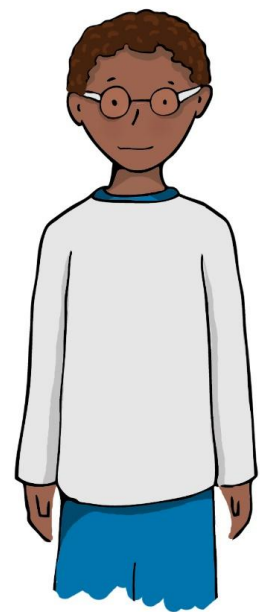
Independent Task

Ms Jones



Try this

Xavier and Yasmin have written number sequences.



What sequence would we get if we added our sequences term-by-term?

I think we can work out any term in the new sequence we form.



Xavier: 11, 15, 19, 23, ...

Yasmin: -7, -1, 5, 11, ...

Use the answer to Xavier's question to explore Yasmin's statement.



Independent task

1. The first 5 terms of 2 sequences are:

3, 7, 11, 15, 19

8, 6, 4, 2, 0

- a) What is the 10th term of the sequence formed by adding these two sequences?
- b) What is the 20th term of the sequence formed by subtracting the second sequence from the first?

2. The n^{th} term of 2 sequences are:

$6n - 1$

$-8n + 4$

- a) What is the 10th term of the sequence formed by adding these two sequences?
- b) Decide if 4 will occur in the sequence formed by adding these sequences.



Explore

-9, -2, 5, 12, 19

Write three sequences that could be added together to form the sequence above, where:

- all three are ascending;
- two are ascending and one is descending;
- two are descending and one is ascending.

