

# lots of ALGEBRA 5

Expand

$$4(x-5)$$

$$4x-45$$

$$4x+20$$

$$4x-20$$

$$4x-5$$

Expand and simplify

$$4m(e+5)$$

Expand and simplify

$$4m(x-5)$$

Expand and simplify

$$4(x+5) - 5(x-3)$$

Expand and simplify

$$4m(9-5m)$$

Expand and simplify

$$4m(m+5)$$

Factorise

$$4x-10$$

Factorise

$$2x+8$$

Factorise

$$2xy-3x$$

Factorise

$$2x^2-3x$$

Factorise

$$5z-10z^2$$

Factorise

$$5ab-4b^2$$

Find the next 2 terms of this sequence

$$11, 19, 27, 35, \dots, \dots$$

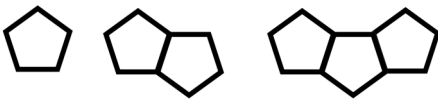
Explain why 96 cannot be in this sequence

Find the next 2 terms of this sequence

$$11, 21, 31, 41, 51, \dots, \dots$$

Is 102 in this sequence?

A sequence is made up from straight lines

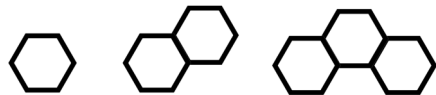


Fill in this table

Shape	1	2	3	4	5	6
lines		9				

How many lines will pattern 100 have?

A sequence is made up from straight lines



Fill in this table

Shape	1	2	3	4	5	6
lines		11				

How many lines will pattern 100 have?

Find the first 4 terms and the 10th term of the sequence given by

$$n^{\text{th}} \text{ term} = 4n+1$$

Find the first 4 terms and the 10th term of the sequence given by

$$n^{\text{th}} \text{ term} = 5n+1$$

Find the first 4 terms and the 10th term of the sequence given by

$$n^{\text{th}} \text{ term} = n^2 + 1$$

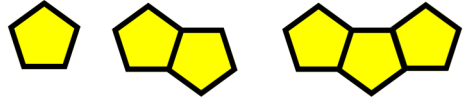
Find the nth term of this sequence

$$4, 7, 10, 13, \dots, \dots$$

Find the nth term of this sequence

$$11, 21, 31, 41, 51, \dots, \dots$$

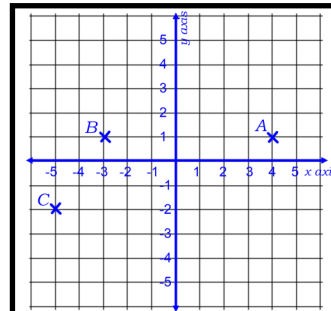
A sequence is made up from straight lines



Find the nth term of this sequence

Find the nth term of this sequence

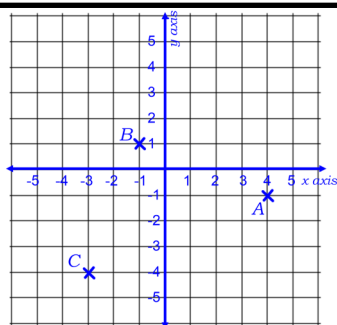
$$31, 27, 23, 19, \dots, \dots$$



What are these coordinates?

Another point D makes ABCD a parallelogram.

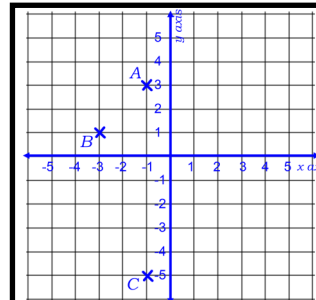
Where is D?



What are these coordinates?

Another point D makes ABCD a square.

Where is D?



What are these coordinates?

Another point D makes ABCD a kite

Where is D?