


Relationships.

You should be able to: Extend simple number patterns.
 Generalise number patterns using symbols.

Example 1: Complete the following number sequence.

1, 6, 11, 16, 21, 26, 31, 36

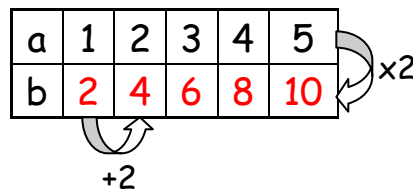


+5 +5 +5 +5 +5 +5

Just follow the number sequence, its going up in 5's, so continue the sequence by doing the same thing.

Example 2: Find a relationship between a and b from the table below.

a	1	2	3	4	5
b	2	4	6	8	10



This question wants you to give a formula for b in terms of a. So the formula will say b = *something* multiplied by a

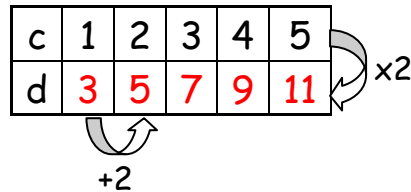
You should first look at what we are adding up each time. In this example it is 2. This becomes the number we multiply by to go from a to b.

So we can say that $b = 2a$

This formula works for all values in the table. Try substituting in a value for a and you will get the corresponding value for b

Example 3: Find a relationship between c and d from the table below.

c	1	2	3	4	5
d	3	5	7	9	11



Again we first start by looking to see what we add along the bottom, again its 2.

So again we multiply by this same number. But this time, multiplying by 2, doesn't give us the value of d . So we need to add a number.

So we can say that $d = 2c + 1$