

This is the four times table shifted by 3:

7, 11, 15, 19...39, 43, 47...103, 107, 111...

**What do you notice about the differences between consecutive terms?**

Here are two more times tables that have been shifted.  
Can you work out the times table and the shift?

a) 8, 13, 18, 23, 28                      Times table:              Shift:

b) 27, 41, 55, 69, 83                      Times table:              Shift:

Here we have given you five randomly selected terms from shifted times tables. Can you work out the times table and the shift?

c) 79, 191, 37, 51, 205                      Times table:              Shift:

d) 104, 454, 254, 604, 704                      Times table:              Shift:

e) 127, 414, 332, 619, 374                      Times table:              Shift:

**Here are some questions to consider:**

What can you say if the numbers are all odd?  
What about if they are all even?  
Or a mixture of odd and even?

What can you say if the units digits are all identical?  
What if there are only two different units digits?

What can you say if the difference between two numbers is prime?  
What can you say if the difference between two numbers is composite (not prime)?

Can you explain how you worked out the table and shift each time, and why your method will always work?