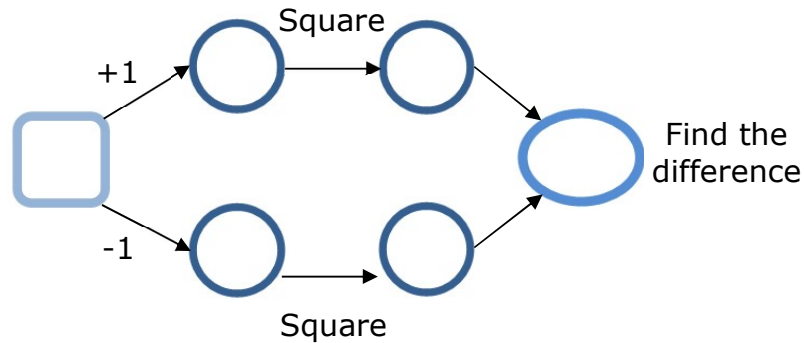


Choose a number in the 3 times table. Take the numbers on either side of your chosen number and find the difference between their squares.



Try it a few times.  
 What do you notice?  
 Can you prove it will always happen?

Now, choose a number in the 5 times table.  
 Take the numbers on either side of your chosen number and find the difference between their squares.

Try it a few times.  
 What do you notice?  
 Can you prove it will always happen?

Is there a similar relationship for other times tables?

## Extension

Instead of taking the numbers on either side of your starting number, investigate what happens if you take the numbers two above and two below your starting number and then work out the difference between their squares...