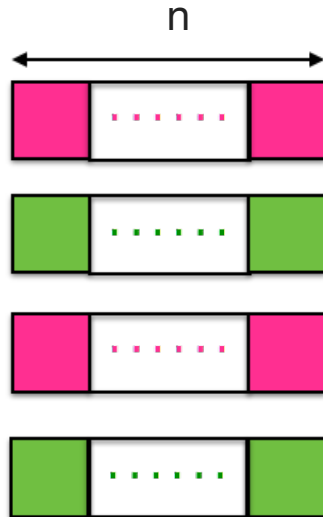




# PROOF: MULTIPLES OF FOUR

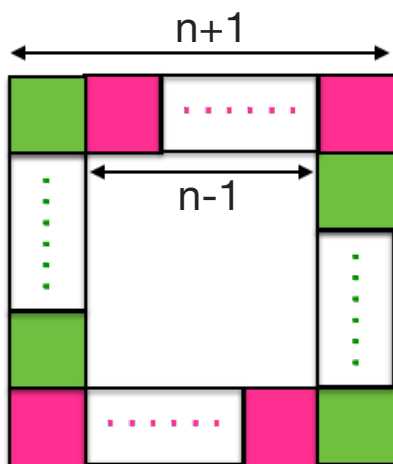
Any multiple of 4 can be thought of as 4 equal length 'sticks'.



$n$  squares per stick

4 sticks =  $4n$  squares

These four sticks can form a square frame which is: a larger square subtract a smaller square in the centre.



$$(n+1)^2 - (n-1)^2 = 4n$$

This works for any value of  $n$ , so all multiples of 4 can be expressed as the difference of two squares.