











even



exercise 3: finish writing this proof by yourself

Let's try another



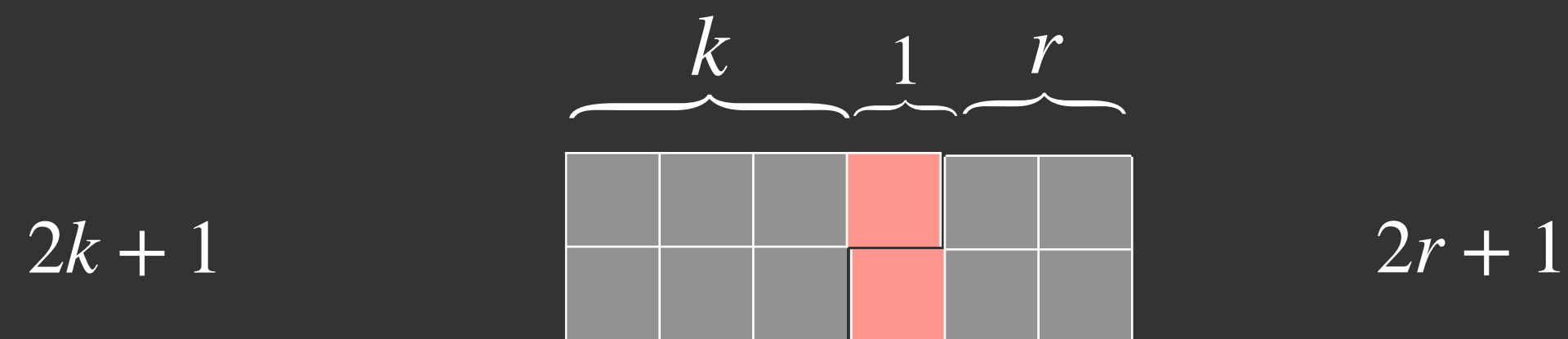
# let's try another

## Theorem

For all integers  $m$  and  $n$ , if  $m$  and  $n$  are odd, then  $m+n$  is even.



- Visual intuition



$$\begin{array}{ccccccc} (2k + 1) & + & (2r + 1) & = & 2(k + r + 1) \\ m & + & n & = & 2(s) \end{array}$$

- an integer  $n$  is called **even** if there is an integer  $k$  where  $n = 2k$

*exercise 3: finish writing this proof by yourself*



# the principle of mathematical induction

*everybody do the wave!*

