even

our first proof (by construction)
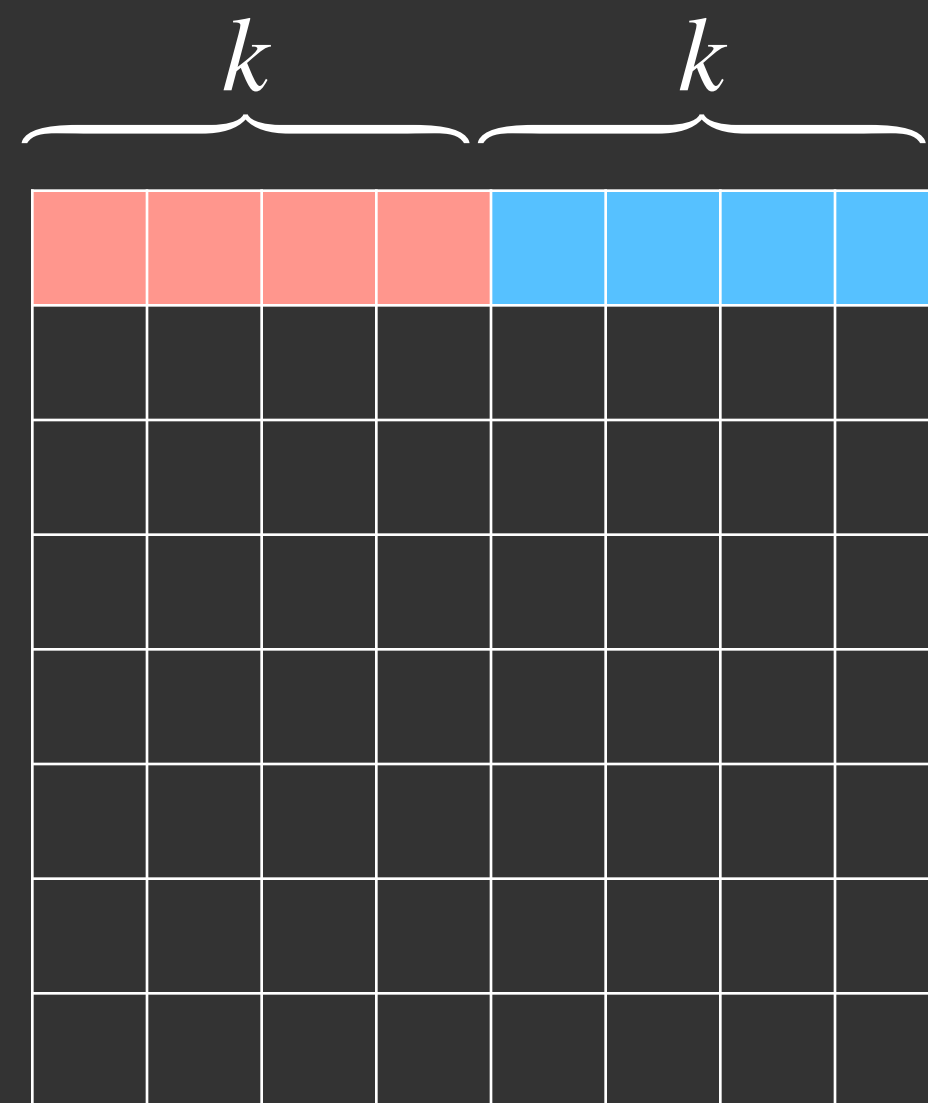
PROVE IT

our first proof (by construction)

> **Theorem**
>
> For all integers n, if n is even, then n^2 is even.

PROVE IT

- If possible, it's helpful to draw some pics

$$\overbrace{\hspace{2cm}}^{k} \overbrace{\hspace{2cm}}^{k}$$

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

our first proof (by construction)

> **Theorem**
>
> For all integers n, if n is even, then n^2 is even.

- If possible, it's helpful to draw some pics

$$\overbrace{}^{k}\overbrace{}^{k}$$

$2k$