

Beweisen mit Punktmustern

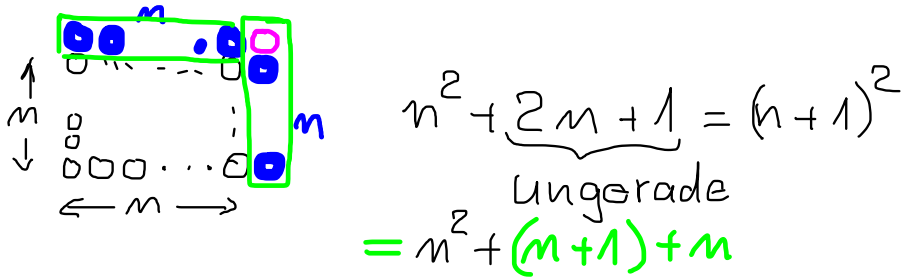
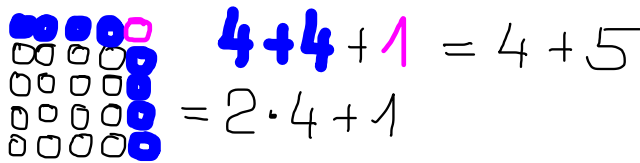
Quadratzahlen



$$\begin{array}{r} 12^2 \quad 13^2 \\ 144 \quad 169 \\ \hline \quad \quad +25 \end{array}$$

$$1, 4, 9, 16, 25, 36, \dots$$

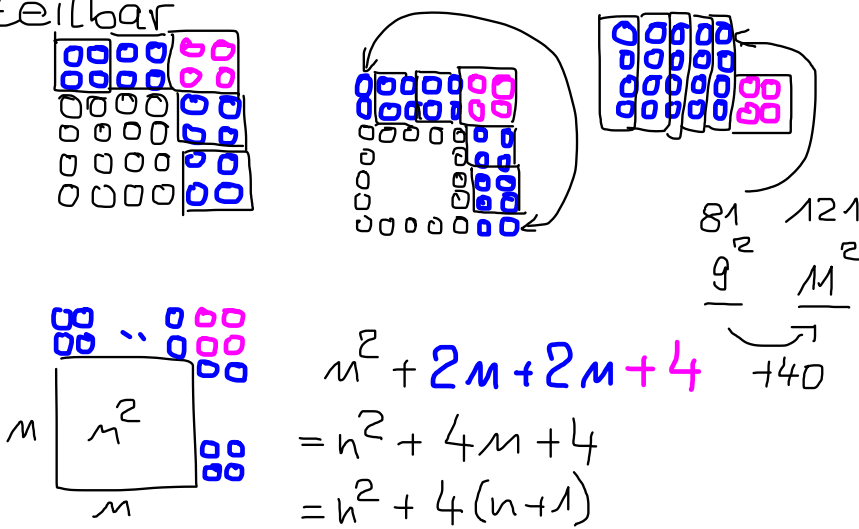
$\leftarrow \quad \leftarrow \quad \leftarrow \quad \leftarrow$
 $+3 \quad +5 \quad +7 \quad +9 \quad +11$



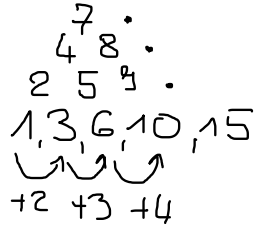
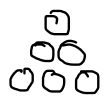
$$1 \quad 4 \quad 9 \quad 16 \quad 25 \quad 36 \quad 49$$

$\leftarrow \quad \leftarrow \quad \leftarrow \quad \leftarrow$
 $+8 \quad +12 \quad +16 \quad +20$

Die addierten Zahlen sind alle durch 4 teilbar



Dreieckszahlen



$$D_1 = 1 \quad D_2 = 3 \quad D_3 = 6 \quad D_4 = 10$$