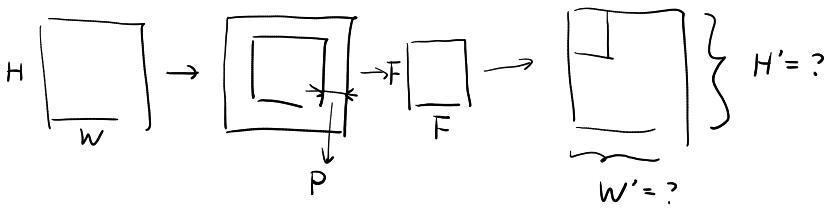

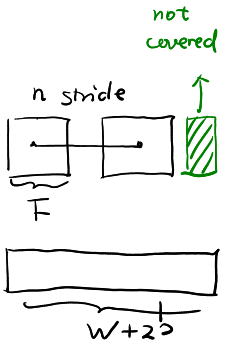

Assume we need n stride to cover most of the width of the padded input.

$$W + 2P \geq F + nS$$

$$nS \leq W + 2P - F$$

$$n \leq \frac{W+2P-F}{S}$$

pick the maximum $n = \left\lfloor \frac{W+2P-F}{S} \right\rfloor$

The width of the output layer W' is the number of stride $+1$ $= n+1 = \left\lfloor \frac{W+2P-F}{S} \right\rfloor + 1$

similarly, $H' = \left\lfloor \frac{H+2P-F}{S} \right\rfloor + 1$

In practice we would choose P and F

s.t. $\frac{W+2P-F}{S} \in \mathbb{Z}^+$