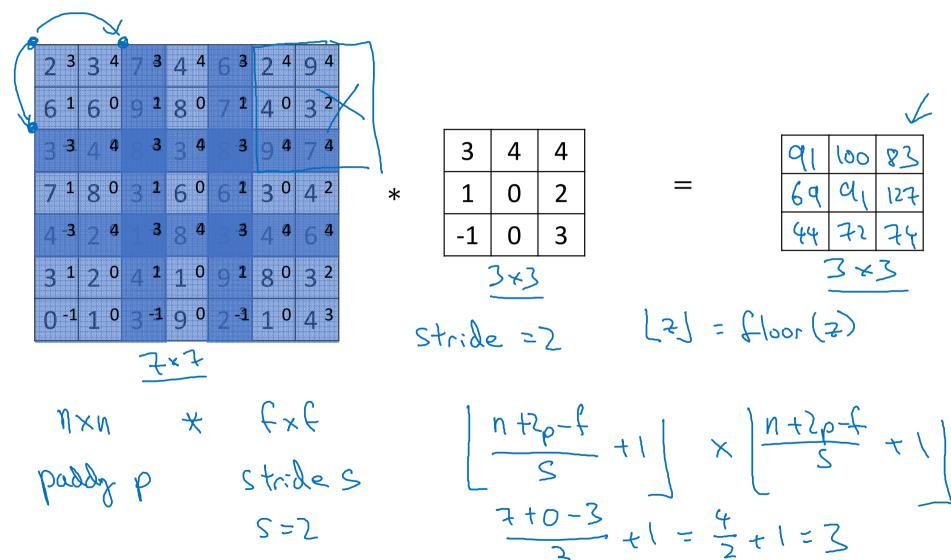


Convolutional Neural Networks

Strided convolutions

Strided convolution



Andrew Ng

Summary of convolutions

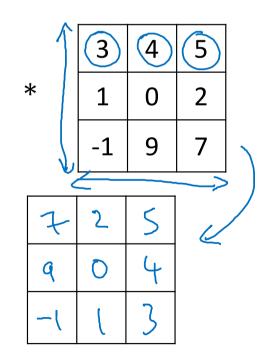
$$n \times n \text{ image}$$
 $f \times f \text{ filter}$ padding p stride s

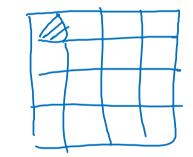
$$\left[\frac{n+2p-f}{s}+1\right] \times \left[\frac{n+2p-f}{s}+1\right]$$

Technical note on <u>cross-correlation</u> vs. convolution

Convolution in math textbook:

27	3	7 ⁵	4	6	2
6	6°	9	8	7	4
3	4	83	3	8	9
7	8	3	6	6	3
4	2	1	8	3	4
3	2	4	1	9	8





$$(A * B) * C = A \times (B * C)$$

Andrew Ng