Suppose we have an image of dimension n x n and a convolutional kernel of dimension k x k with stride s. What is the dimension of the output after the convolution has been applied to the image? To get to this answer let's do some examples.

Image-dimension	Convolution-dimension	Stride	Output-dimension
5x5	3x3	1	3
5x5	3x3	2	2
5x5	2x2	1	4
5x5	2x2	2	?
7x7	3x3	2	?

Based on some more examples can you determine a formula for the output based on the convolution dimension(k) and the stride(s):
Output size = ((n-k)/s)+1, ((n-k)/s)+1

A convolutional kernel has the number of inchannels and outchannels. Being familiar with this will help you a lot with the deep learning libraries Keras and Pytorch.

Inchannel:

If an input image has k channels then your convolutional kernel inchannels is also k. For an image to have k channels means its dimensions are n x n x k. So you convolutional kernel will have dimensions c x c x k.

Outchannel:

This is simply the number of convolutional kernels we are applying. If the input image is n x n x k and we apply one convolutional kernel of c x c x k the output is n' x n' x 1. But if I apply (for example) three convolutional kernels each of dimensions c x c x k then my new image will have dimensions n' x n' x 3.