

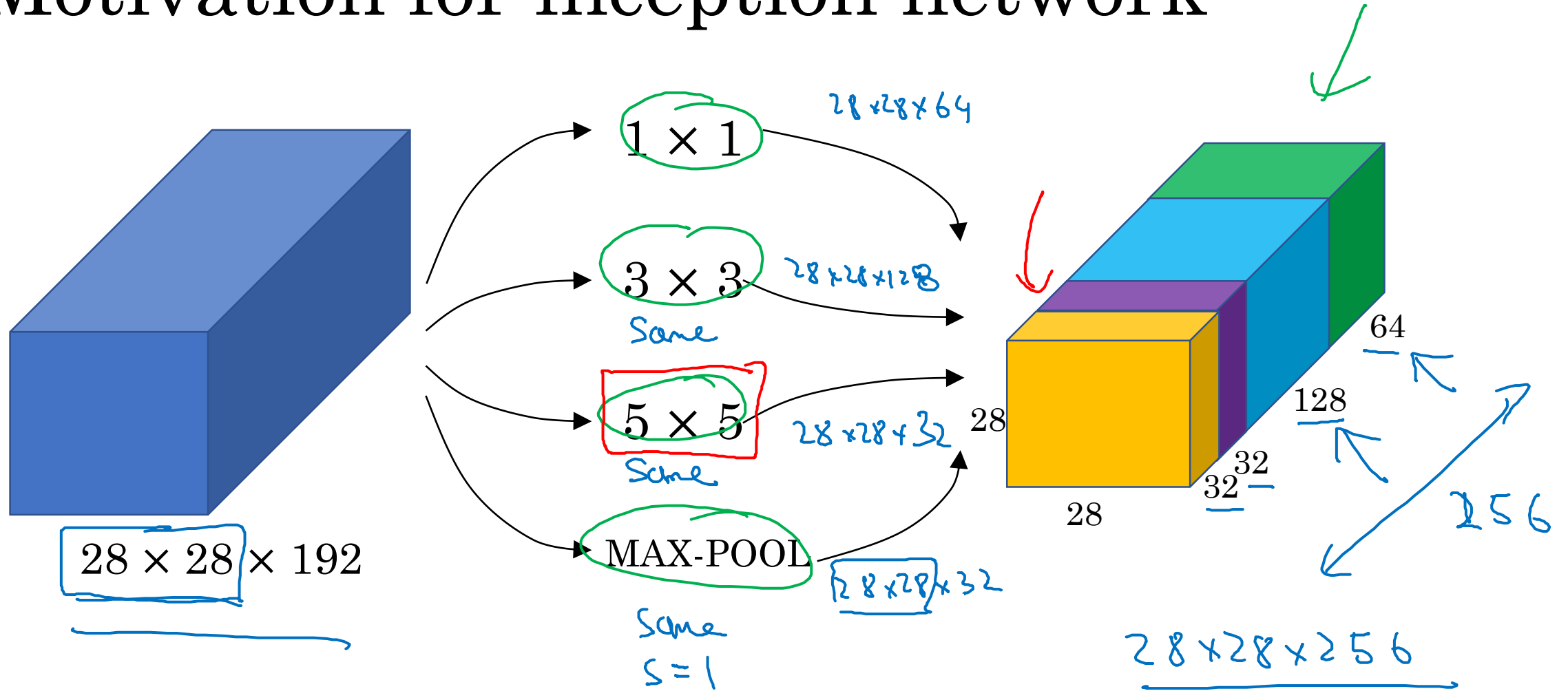


deeplearning.ai

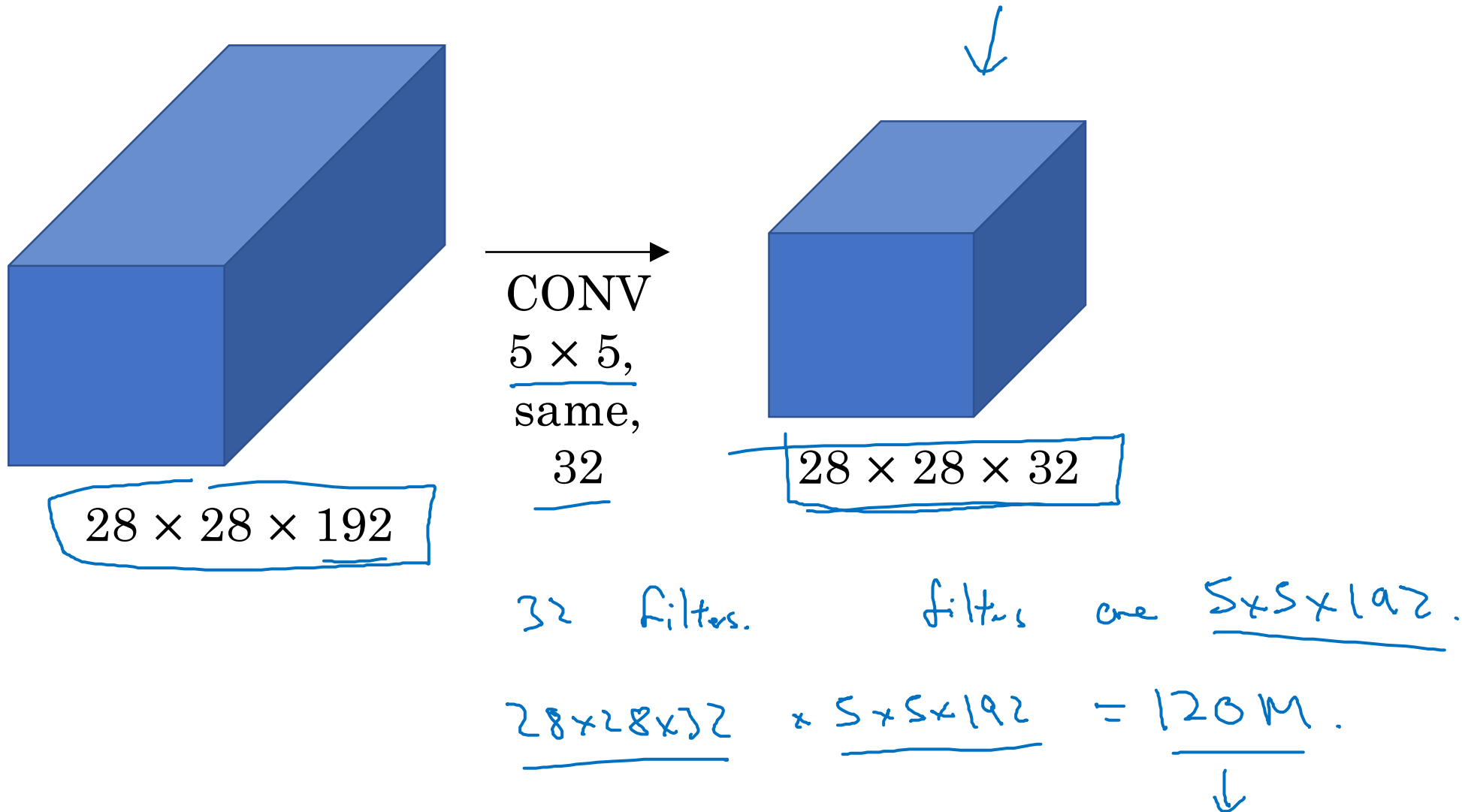
Case Studies

Inception network motivation

Motivation for inception network

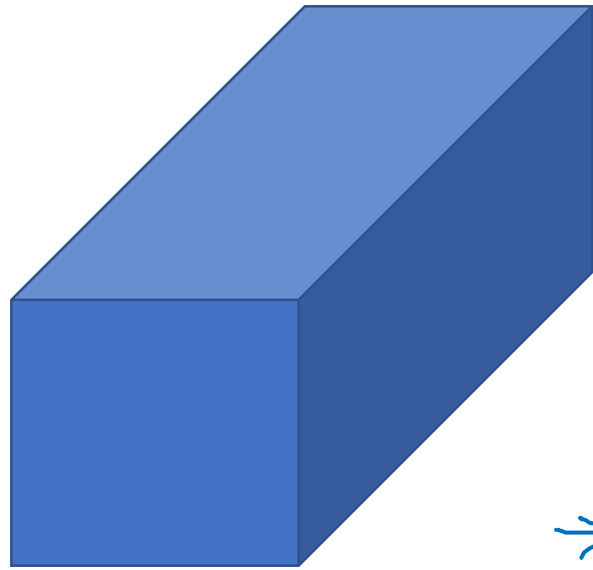
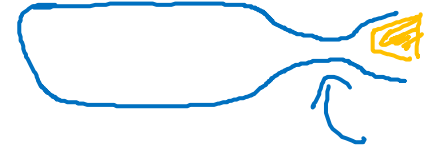


The problem of computational cost



Using 1×1 convolution

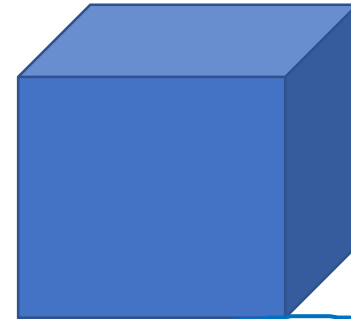
"bottleneck layers"



$28 \times 28 \times 192$

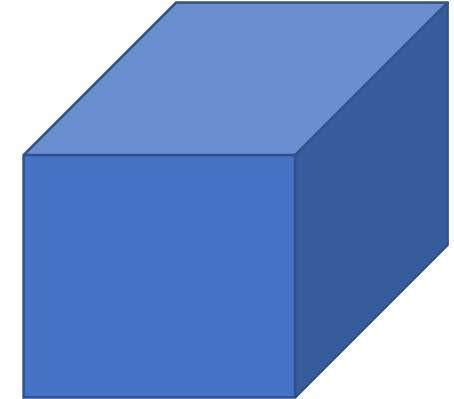
CONV
 1×1 ,
 $\rightarrow 16$,
 $\rightarrow 1 \times 1 \times 192$

$$28 \times 28 \times 16 \times 192 = 2.4M$$



$28 \times 28 \times 16$

CONV
 5×5 ,
32,
 $5 \times 5 \times 16$



$28 \times 28 \times 32$

$$28 \times 28 \times 32 \times 5 \times 5 \times 16 = 10.0M$$

12.4M

120M