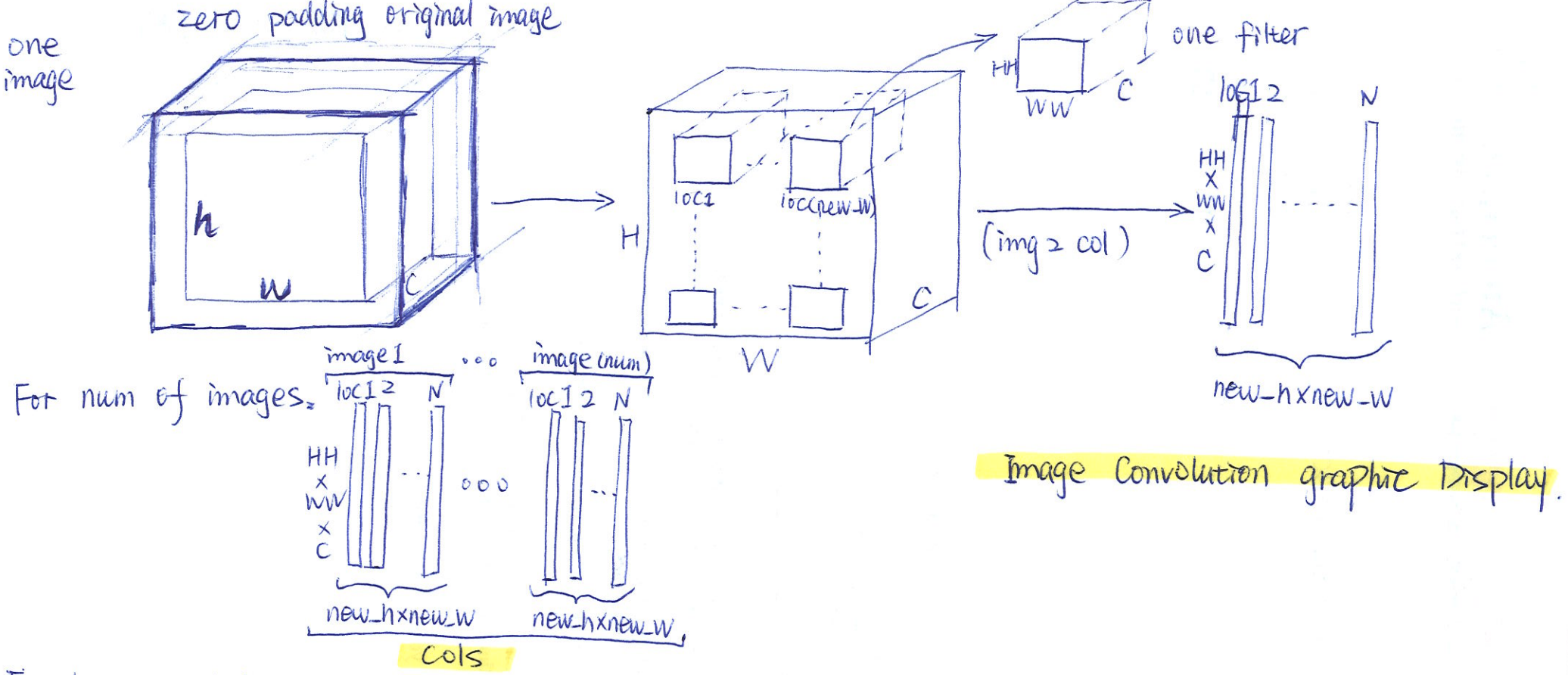
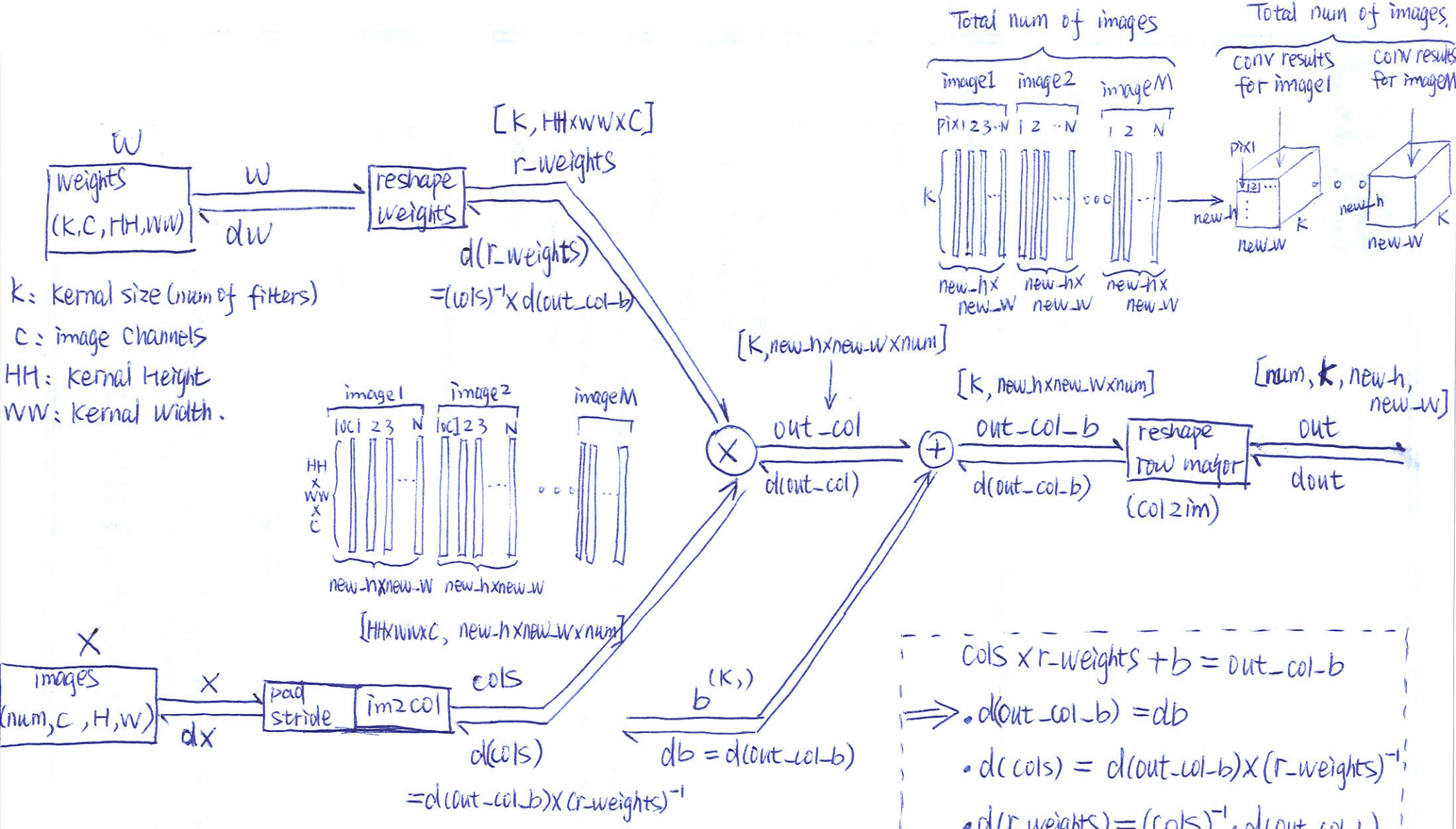

one image
zero padding original image
h
w
C
H
W
loc1
loc(new_w)
HH
WW
C
one filter
(img 2 col)
log1 2
N
HH x WW x C
new_h x new_w
For num of images.
image 1
image (num)
loc1 2 N
HH x WW x C
new_h x new_w
cols
Image Convolution graphic Display.
For k number of filters.
filter1
filter2
filter k
HH
WW
C
HH x WW x C
k
r-weights
Convolution process.
r-weights X cols = k [HH x WW x C] X [HH x WW x C]
new_h x new_w x num
+ [b] (k,)
col 2 img
k
pix1 2 N
new_h x new_w x num
image 1
image (num)
reshape
conv results for img1
conv results for img(num)
pix1
new_h
new_w
k



Computational graph for ConvNeuralNets.