Pierre Tebgui

Problem 3

selected = 10

$z = 8 * 10 = 80$

10 filters

80 x 80 x 3 (image dimension) 5 x 5 x 3

outputs: $(80 - 5 + 1) \times (80 - 5 + 1) \times 10$

$= 76 \times 76 \times 10$

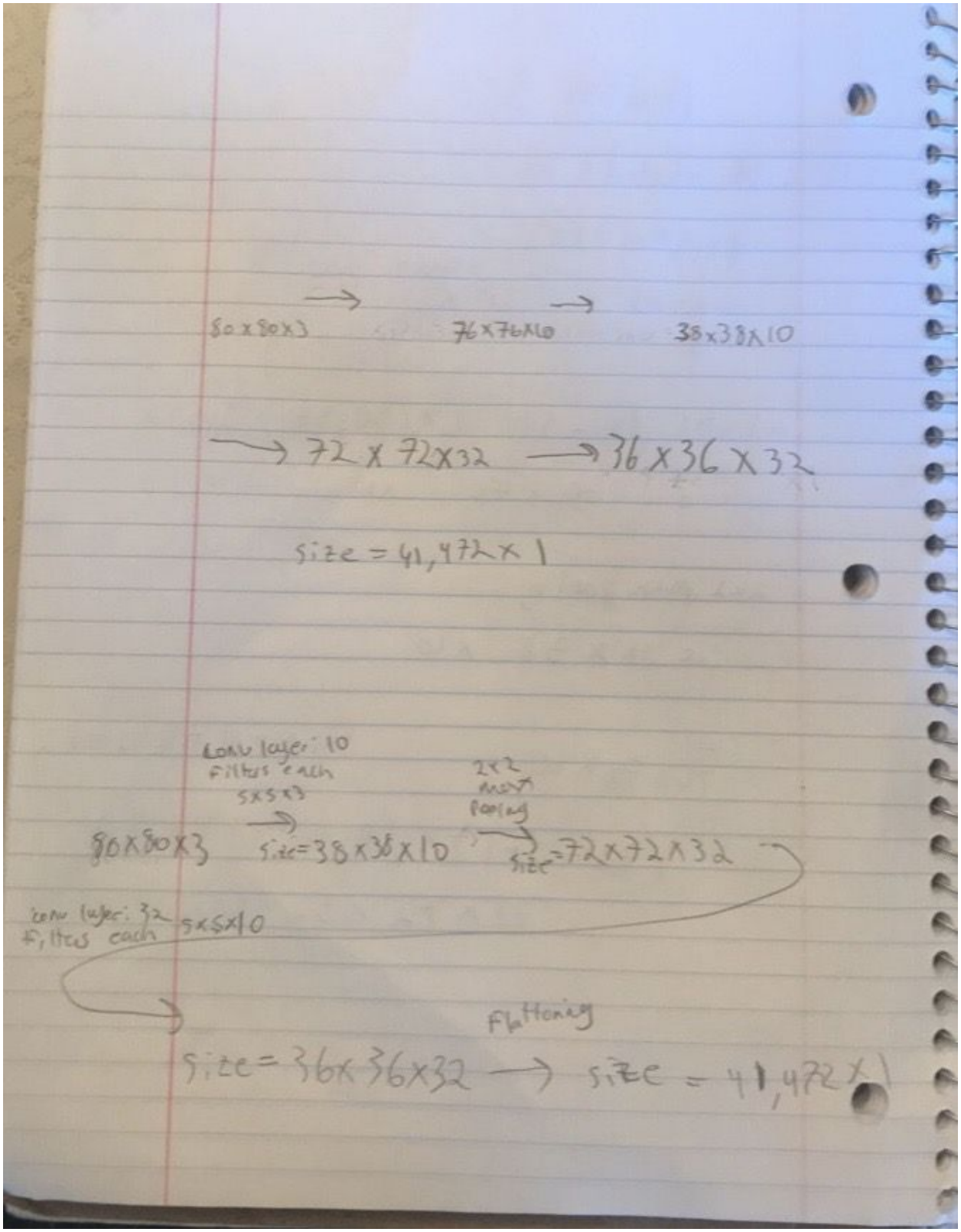
2x2 Max pooling:

$= 38 \times 38 \times 10$

$76 \times 76 \times 10$ 5 x 5 x 10 # filters = 32

$(76 - 5 + 1) \times (76 - 5 + 1) \times 32$

$72 \times 72 \times 32$


80x80x3
76x76x10
38x38x10
72x72x32
36x36x32
size = 41,472x1
Conv layer: 10 filters each 5x5x3
2x2 max pooling
80x80x3
size=38x38x10
size=72x72x32
conv layer: 32 filters each 5x5x10
Flattening
size=36x36x32
size = 41,472x1