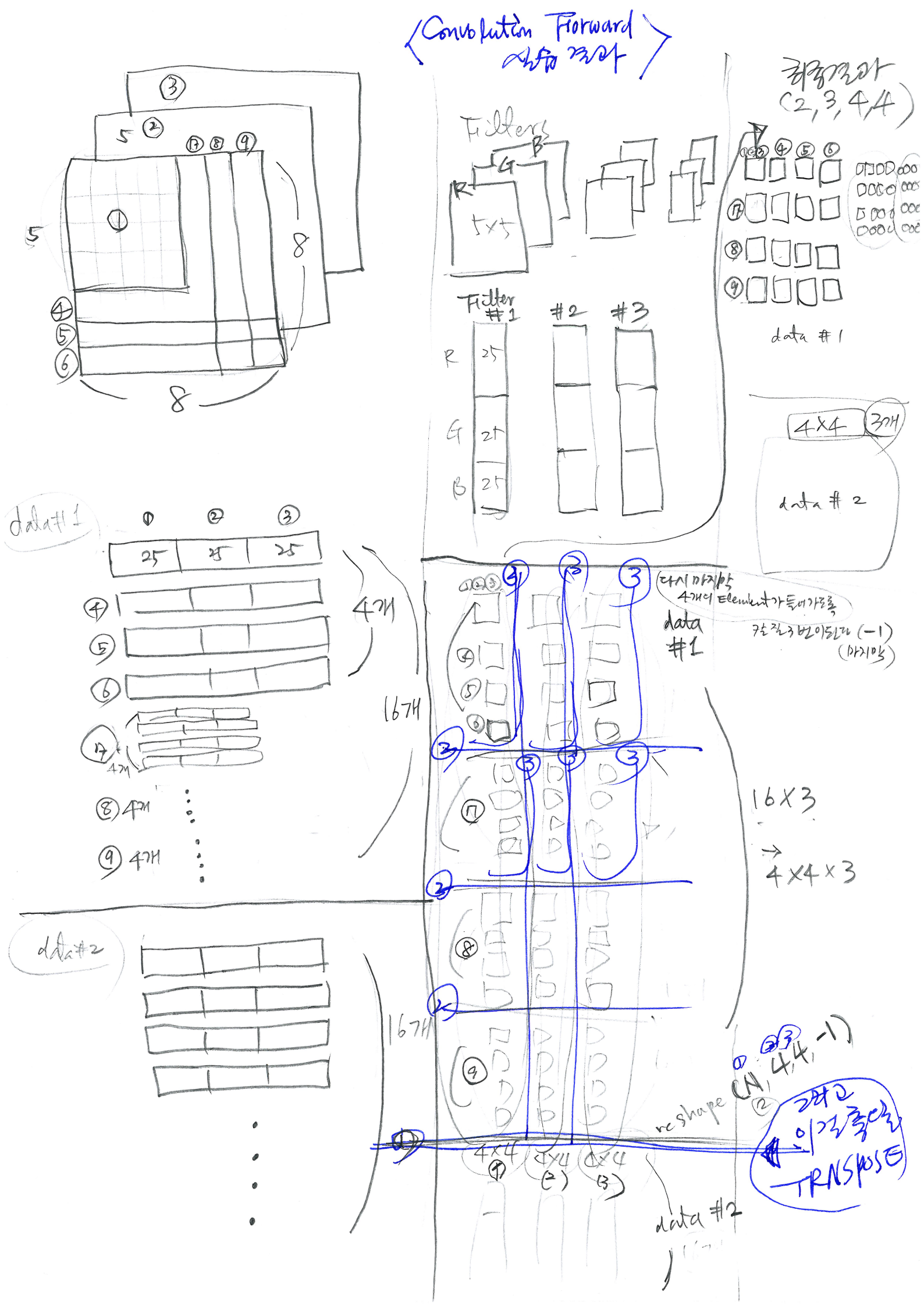
Convolution Forward 과정 그림
결과값 (2, 3, 4, 4)
Filters
R
G
B
5x5
Filter #1
#2
#3
R
G
B
25
25
25
data #1
4x4 3개
data #2
data #1
4개
16개
다시 마지막 4개의 Element가 특이값을 갖고 있으므로 (-1) (마지막)
16x3
→
4x4x3
data #2
16개
reshape
4x4
TRANSPOSE

```
 1 import numpy as np
 2 print("-------------- 동일한 형상 데이터생성 -------------")
 3 #out=np.arange(48)  #0 부터
 4 out=np.arange(1,49) # start - (end-1)
 5 print(out)
 6 out=out.reshape(3,-1)
 7 print(out)
 8 out=out.T
 9 print(out) #16X3
10 print("-------------------------------------------------")
11 out=out.reshape(4,4,-1).transpose(2,0,1)
12 #out=out.reshape(1,4,4,-1).transpose(0,3,1,2)
13 print(out)
```

제목 없음

```
-------------- 동일한 형상 데이터생성 -------------
[ 1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48]
[[ 1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16]
 [17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32]
 [33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48]]
[[ 1 17 33]
 [ 2 18 34]
 [ 3 19 35]
 [ 4 20 36]
 [ 5 21 37]
 [ 6 22 38]
 [ 7 23 39]
 [ 8 24 40]
 [ 9 25 41]
 [10 26 42]
 [11 27 43]
 [12 28 44]
 [13 29 45]
 [14 30 46]
 [15 31 47]
 [16 32 48]]
-------------------------------------------------
[[[ 1  2  3  4]
  [ 5  6  7  8]
  [ 9 10 11 12]
  [13 14 15 16]]

 [[17 18 19 20]
  [21 22 23 24]
  [25 26 27 28]
  [29 30 31 32]]

 [[33 34 35 36]
  [37 38 39 40]
  [41 42 43 44]
  [45 46 47 48]]]
```