In this question, you will be practicing filtering by hand on the following image. You will enter your final result for each question in the provided empty tables.

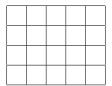| 2	0	5	0	3
0	1	0	3	2
4	0	0	1	2
1	0	3	0	1

Note that you do not have to fill all the cells. If a cell contains a number that is not an integer, enter it as a fraction.

Question (1a)

Apply the correlation filter to the image with **no padding**.

0	0	1
0	0	0
-1	0	0

Enter your final result here in integer or fraction:

Question (1b)

Apply the convolution filter to the image with **no padding**.

0	0	1
0	0	0
-1	0	0

Enter your final result here in integer or fraction:

Question (1c)

Apply the following filter to the image with **zero padding** to make the input image and the output have the same shape. **Note:** zero padding means to pad your image with zeros; it is not the same as "no padding".

1/9	1/9	1/9
1/9	1/9	1/9
1/9	1/9	1/9

Enter your final result here in integer or fraction: