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.

1	0	0	0	1
2	3	0	8	0
2	0	0	0	3
0	0	1	0	0

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:

	-2		0	1
	0	8	-1	

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:

	2	0	-1	
	0	-8	1	

Question (1c)

Apply the filter to the image with **zero padding** (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:

$\frac{6}{9}$	$\frac{6}{9}$	$\frac{11}{9}$	$\frac{9}{9}$	$\frac{9}{9}$
$\frac{8}{9}$	$\frac{8}{9}$	$\frac{11}{9}$	$\frac{12}{9}$	$\frac{12}{9}$
$\frac{7}{9}$	$\frac{8}{9}$	$\frac{12}{9}$	$\frac{12}{9}$	$\frac{11}{9}$
$\frac{2}{9}$	$\frac{3}{9}$	$\frac{1}{9}$	$\frac{4}{9}$	$\frac{4}{9}$

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[0.0000, 0.0000, 0.0000]
[0.0000, 0.0000, 0.0000]
[0.0000, 0.0000, 0.0000]
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