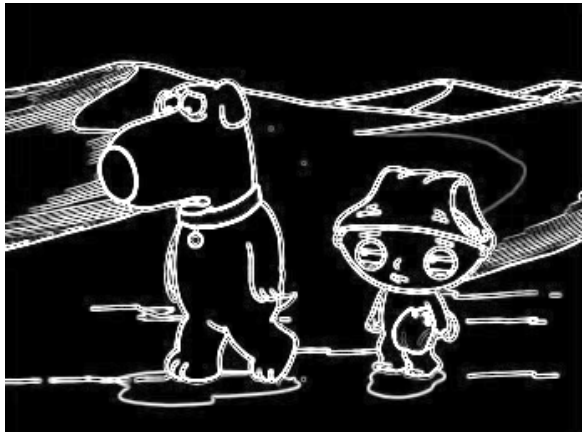


Quiz

For the following image pairs, which filter (of the following) applied to the left image produces the right image?

Filters:

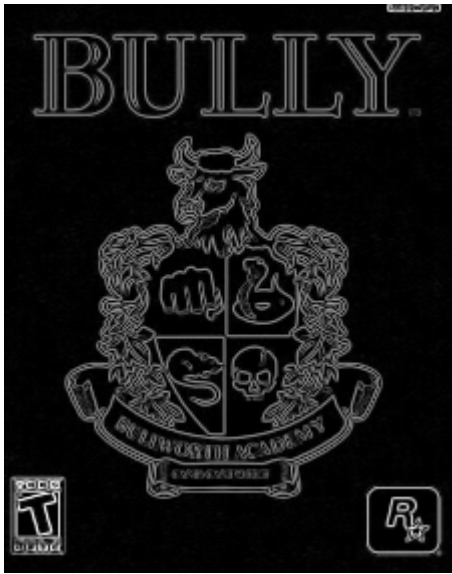
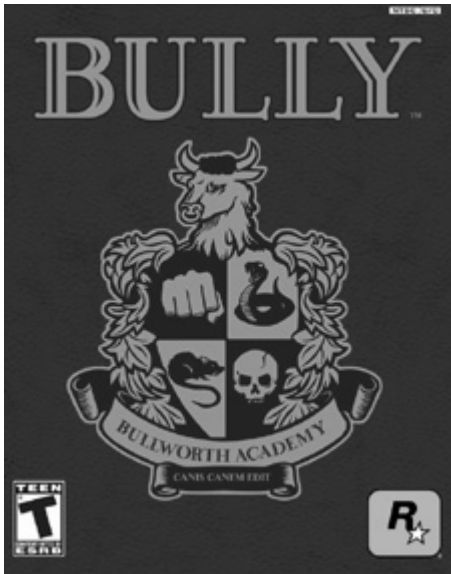
<u>Name</u>	<u>Form</u>	<u>Name</u>	<u>Form</u>
Gauss smooth	$\frac{1}{16} \begin{bmatrix} 1 & 2 & 1 \\ 2 & 4 & 2 \\ 1 & 2 & 1 \end{bmatrix}$	Edge – Sobel	$M_x = \begin{bmatrix} -1 & 0 & 1 \\ -2 & 0 & 2 \\ -1 & 0 & 1 \end{bmatrix}, M_y = \begin{bmatrix} 1 & 2 & 1 \\ 0 & 0 & 0 \\ -1 & -2 & -1 \end{bmatrix}$
7x7 Box	$\frac{1}{49} \begin{bmatrix} 1 & 1 & \dots \\ 1 & 1 & \dots \\ \vdots & \vdots & \ddots \end{bmatrix}$	Edge – Roberts	$M_x = \begin{bmatrix} 0 & 1 \\ -1 & 0 \end{bmatrix}, M_y = \begin{bmatrix} 1 & 0 \\ 0 & -1 \end{bmatrix}$
Blur	$\frac{1}{7} [1 \ 1 \ \dots \ 1]$	Median	<i>Non-linear</i>



a) Mask:



b) Mask:



c) Mask:



d) Mask:



e) Mask:



f) Mask:



g) Mask:



h) Mask:



i) Mask:



j) Mask:

**Answers:**

- a) Sobel
- b) 7x7 box
- c) Roberts
- d) Median
- e) 3x3 Gaussian
- f) Horizontal blur
- g) 3x3 Gaussian
- h) Sobel
- i) Roberts
- j) Median