Geometric-Transformation-Example2

Question 1

	$x=0$	$x=1$	$x=2$
$y=0$	1	10	100
$y=1$	4	40	200
$y=2$	7	60	150

The above picture is transformed by a geometric transformation. The (forward) description of this transformation is:

> The pixel at coordinate (x, y) in the original picture moves to the location $(y, 3x-2y)$ in the new picture.

A.

Compute the transformed image using Nearest-Neighbor interpolation.

	$x=0$	$x=1$	$x=2$
$y=0$			
$y=1$			
$y=2$			

B.

Compute the first line of the transformed image using Bilinear interpolation.

	$x=0$	$x=1$	$x=2$
$y=0$			