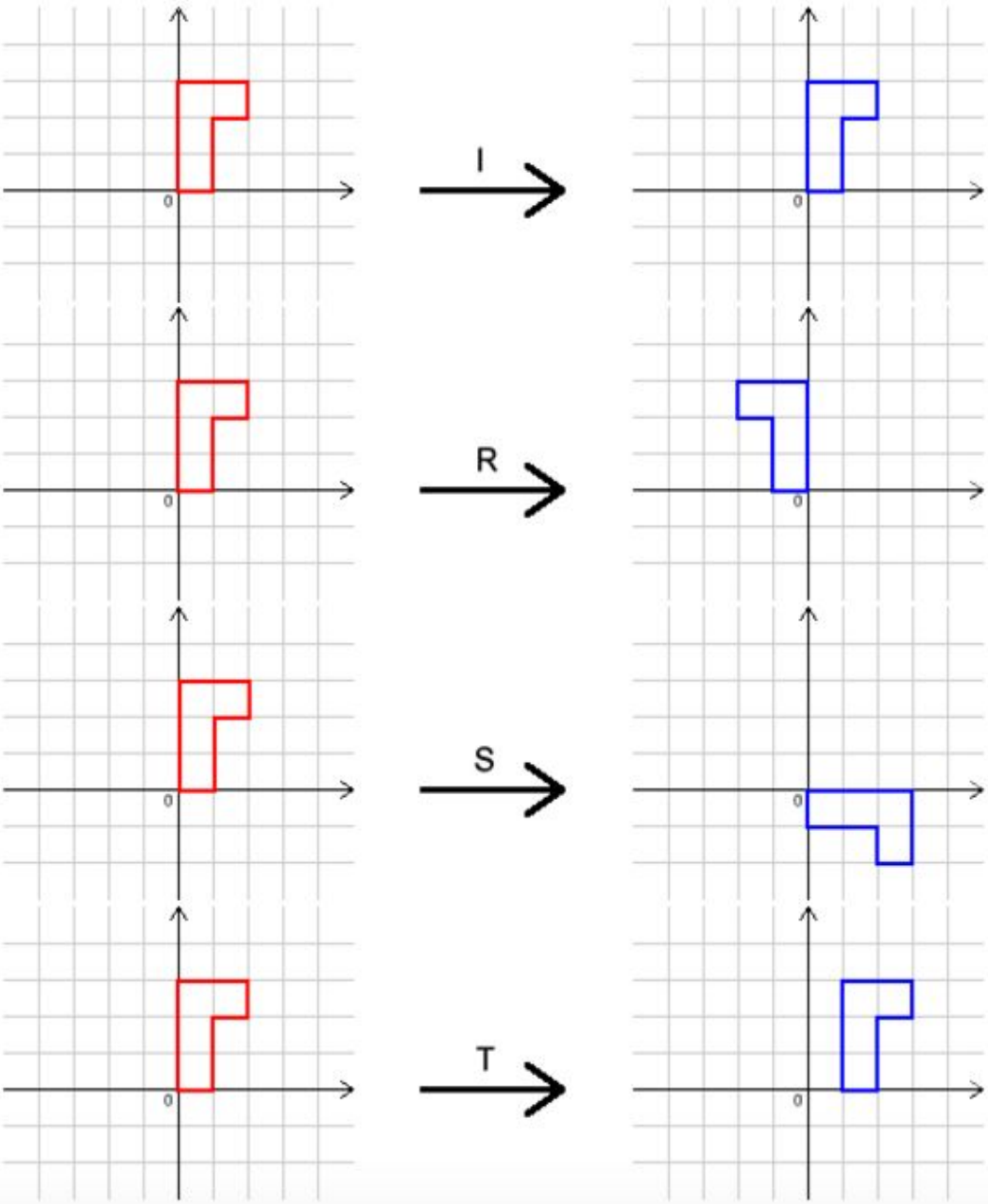
Creating Images Warm-Up

In this problem, we shall use four transformations, I, R, S and T. Their effects are shown below.



Each of the transformations on the first page is a function with inputs that are points in the plane, and outputs that are also points in the plane.

The first transformation, it's called **I**, took the input of (0,0) and mapped it to an output of (0,0). Using our function notation **I**(0,0) = (0,0).

Convince a neighbor that **I**(0,3) = (0,3).

Using the graphs that demonstrate how each transformation takes a pre-image and creates a new image, complete the following tables.

(x,y)	I(x,y)		(x,y)	R(x,y)		(x,y)	S(x,y)		(x,y)	T(x,y)
(0,0)			(0,0)	(0,0)			(0,0)			(1,0)
	(0,3)			(0,3)		(0,3)			(0,3)	
(2,3)				(-2,3)			(3,-2)		(2,3)	(3,3)
(2,2)			(2,2)				(2,-2)		(2,2)	
(1,2)			(1,2)				(2,-1)			(2,2)
	(1,0)		(1,0)	(-1,0)		(1,0)			(1,0)	
(x,y)	(x,y)		(x,y)			(x,y)			(x,y)	(x+1,y)