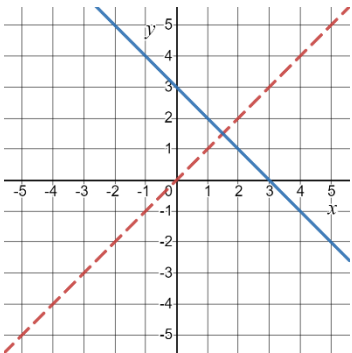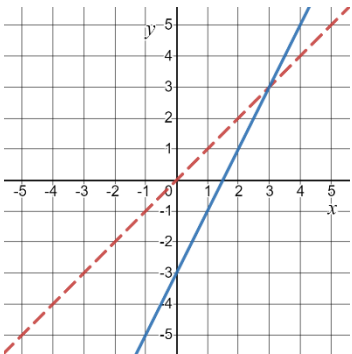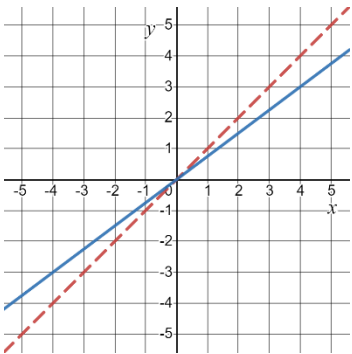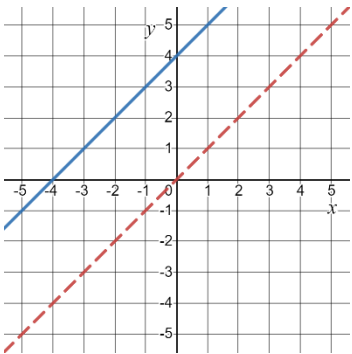# Working with Transformations Worksheet

Complete the following table. Check your graphs by using DESMOS!

Equation	a-value	b-value	Transformations	Sketch
$y = -x + 3$	-1	3	• **Reflection across the x-axis** • **Vertical translation 3 units up**	
$y = 2x - 3$	2	-3	• **Vertical stretch by a factor of 2** • **Vertical translation 3 units down**	
$y = 0.75x$	0.75	0	• **Vertical compression by a factor of 0.75**	
$y = x + 4$	1	4	• **Vertical translation 4 units up**	

Equation	a-value	b-value	Transformations	Sketch
$y = -x - 3$	-1	-3	• **Reflection across the x-axis** • **Vertical translation 3 units down**	
$y = 0.5x + 2$	0.5	2	• **Vertical compression by a factor of 0.5** • **Vertical translation 2 units up**	
$y = -x - 2$	-1	-2	• Reflection across the x-axis • Vertical translation 2 units down	
$y = -0.25x$	-0.25	0	• Reflection across the x-axis • Vertical compression by a factor of 0.25	