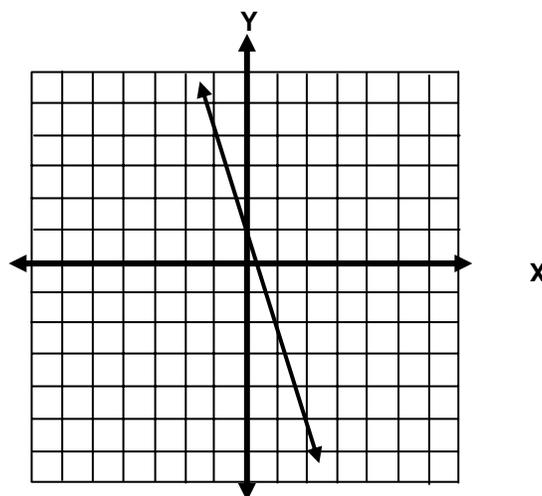# Graph Translation Activity

Directions:

- Copy the following pages on cardstock. Laminate and cut apart. (Students can use dry erase markers to write on laminated cards).

- Students work in small groups to match sets of four cards. The four cards in a matching set should contain:

  1. The original problem with the shift direction

  2. The graph of the original equation

  3. The shifted equation

  4. The shifted graph
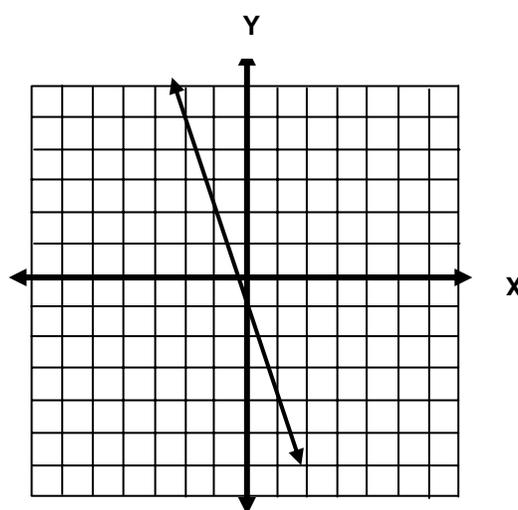
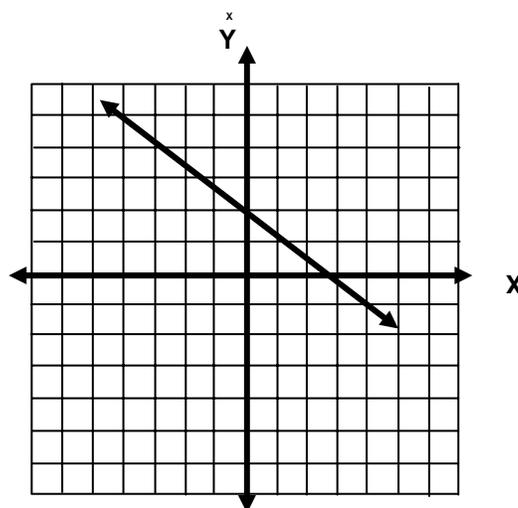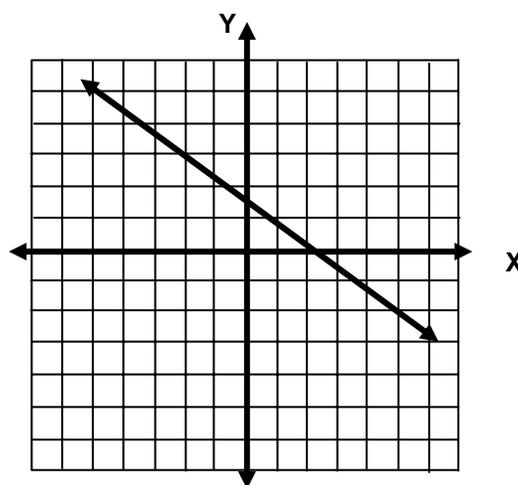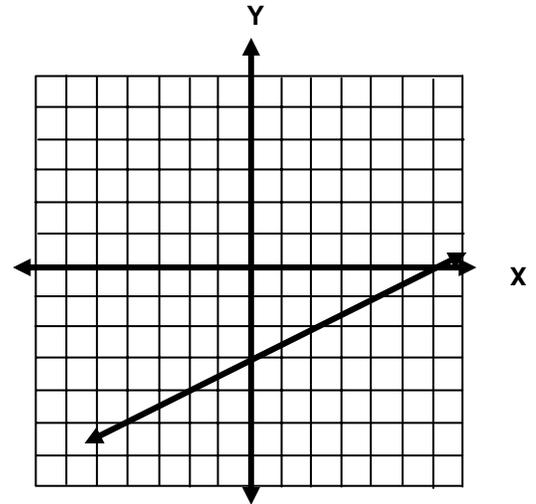|	
1. $y = -3x - 1$ Shift up 2	
$y = -3x + 1$	
2. $y = -\dfrac{3}{4}x + 2$ Shift down 4	
$y = -\dfrac{3}{4}x - 2$	
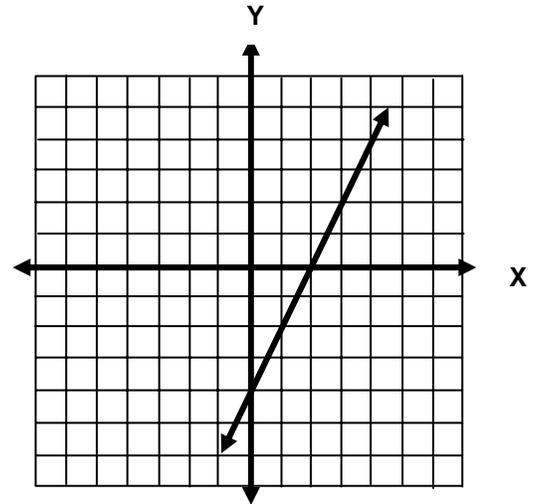
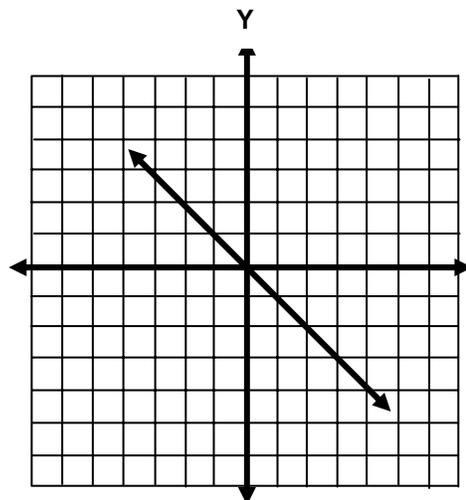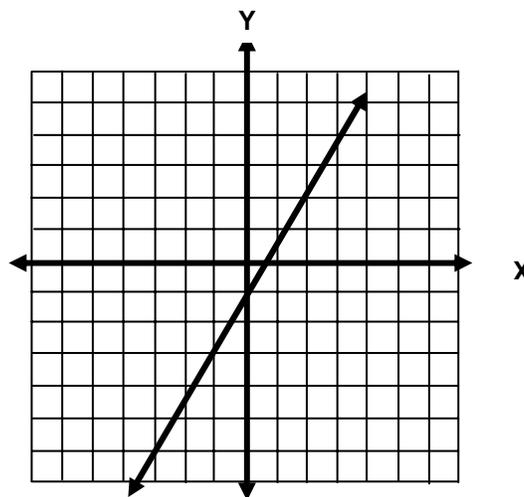|	
3. y = 2x – 4 Shift up 5	
y = 2x + 1	
4. y = $\frac{1}{2}$ x - 3 Shift up 1	
y = $\frac{1}{2}$x - 2	
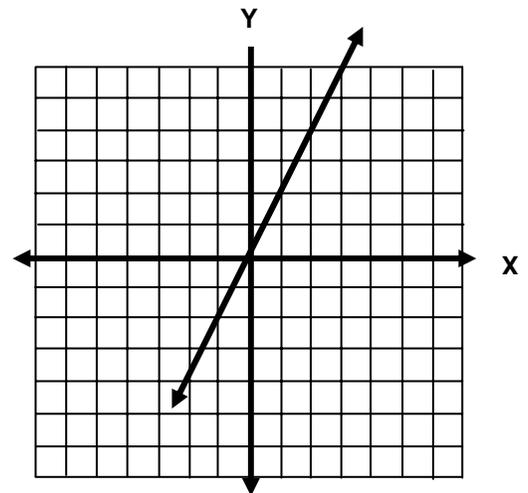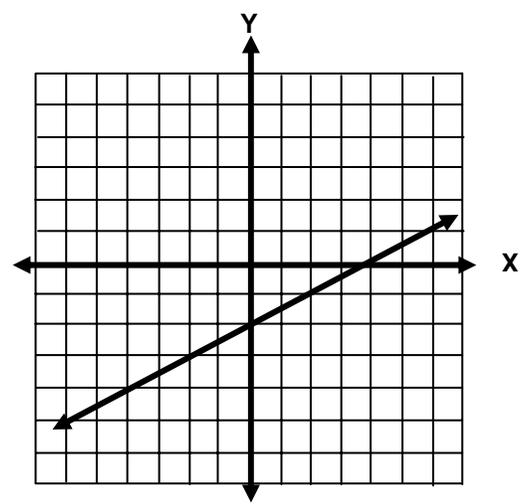
5. $y = -x + 4$
Shift down 4
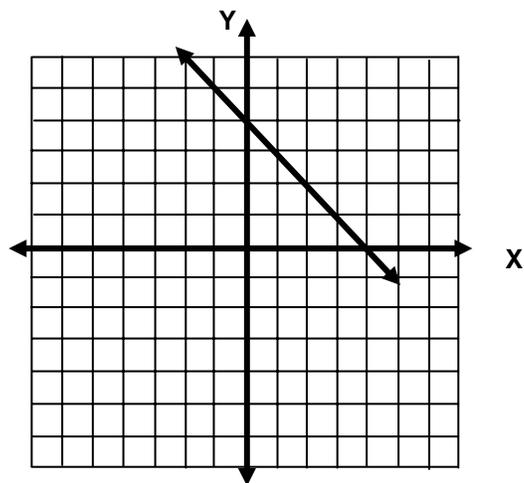
$y = -x$

6. $y = 2x - 1$
Shift up 4

$y = 2x + 3$
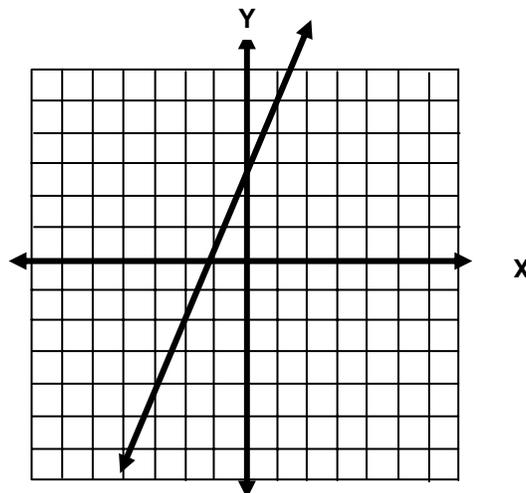
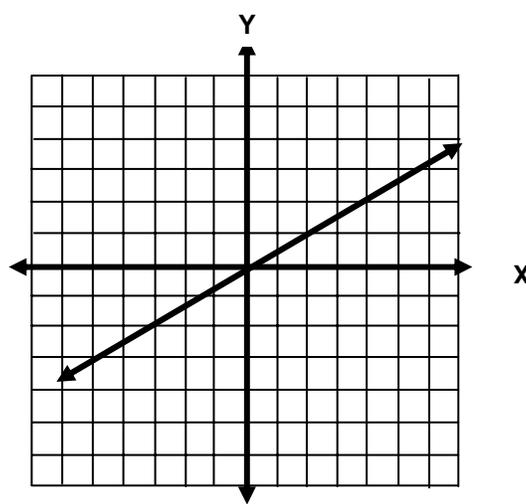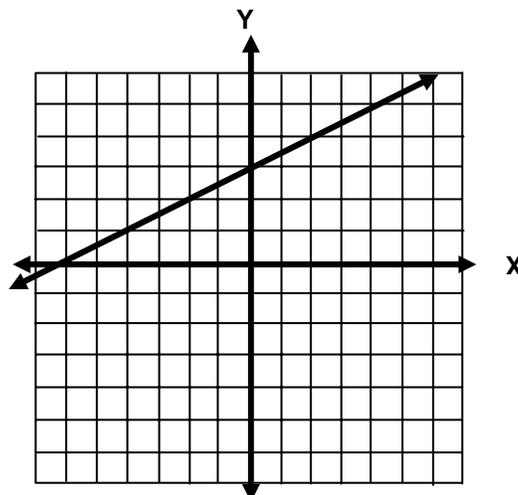|	
7. $y = \dfrac{1x}{2}$ Shift up three	
$y = \dfrac{1}{2}x + 3$	
8. $y = \dfrac{-3x - 5}{4}$ Shift up 6	
$y = \dfrac{-3x + 1}{4}$	