

Using Desmos to Explore Graphs

Graph the Equations on the same Grid	Observations
$y = 3x$	
$y = 10x$	
$y = \frac{1}{5}x$	
Compare the Three Graphs	

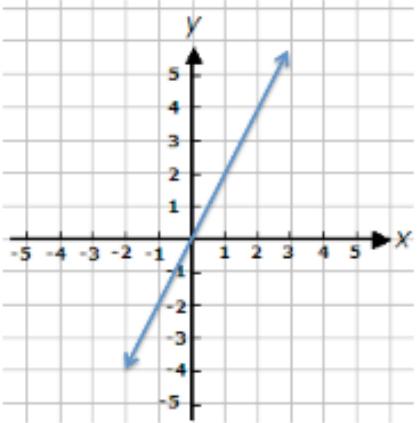
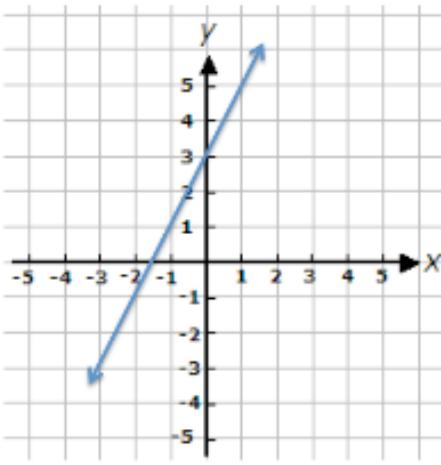
Graph the Equations on the same Grid	Observations
$y = x$	
$y = x + 5$	
$y = x - 7$	
Compare the Three Graphs	

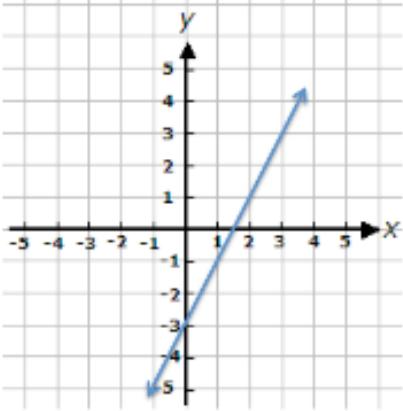
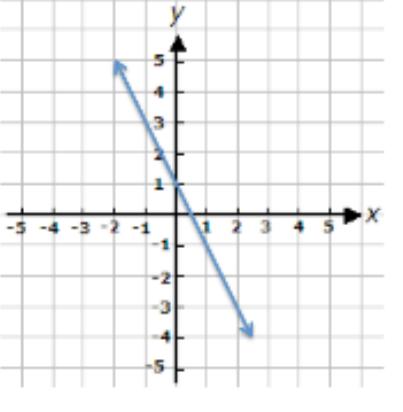
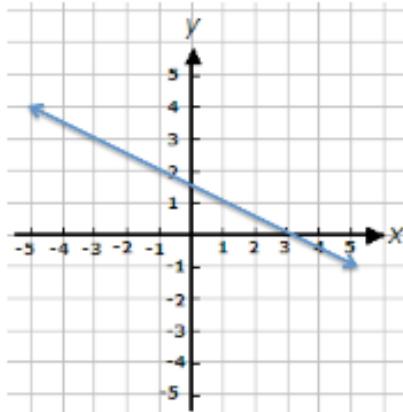
Graph the Equations on the same Grid	Observations
$y = 3x + 4$	
$y = -3x + 4$	
$y = 3x - 4$	
$y = -3x - 4$	
Compare the Three Graphs	

Compare the Equations Below	What are the Similarities and Differences? Steepness? Crosses the y-axis? Increase or Decreases from left to right?
$y = 3x + 5$	
$y = 8x + 5$	
$y = \frac{1}{8}x + 5$	

Compare the Equations Below	What are the Similarities and Differences? Steepness? Crosses the y-axis? Increase or Decreases from left to right?
$y = 3x - 4$	
$y = 3x$	
$y = 3x + 5$	

Compare the Equations Below	What are the Similarities and Differences? Steepness? Crosses the y-axis? Increase or Decreases from left to right?
$y = 2x + 6$	
$y = -2x + 6$	
$y = 2x - 6$	

Graph	Observations and Equations
	
	

Graph	Observations and Equations
 <p>A Cartesian coordinate system showing a line with a positive slope. The x-axis ranges from -5 to 5, and the y-axis ranges from -5 to 5. The line passes through the points (-1, -5), (0, -3), (1, -1), (2, 1), (3, 3), and (4, 5). It has a y-intercept at (0, -3) and an x-intercept at approximately (-1.5, 0).</p>	
 <p>A Cartesian coordinate system showing a line with a negative slope. The x-axis ranges from -5 to 5, and the y-axis ranges from -5 to 5. The line passes through the points (0, 5), (1, 2), (2, -1), and (3, -4). It has a y-intercept at (0, 5) and an x-intercept at approximately (2.5, 0).</p>	
 <p>A Cartesian coordinate system showing a line with a negative slope. The x-axis ranges from -5 to 5, and the y-axis ranges from -5 to 5. The line passes through the points (0, 4), (1, 2), (2, 0), (3, -2), and (4, -4). It has a y-intercept at (0, 4) and an x-intercept at approximately (2, 0).</p>	