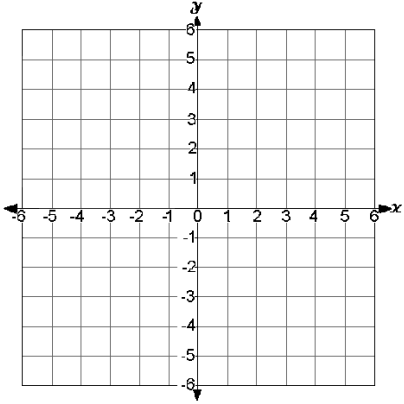
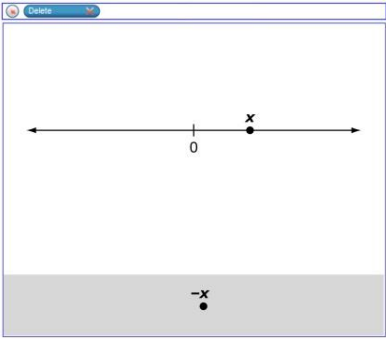
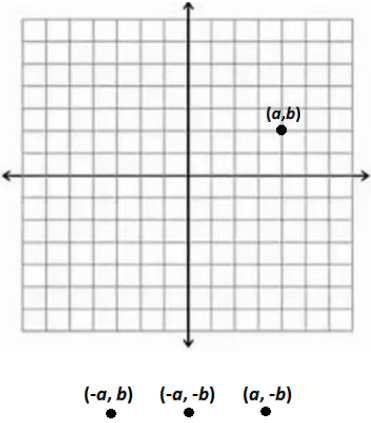
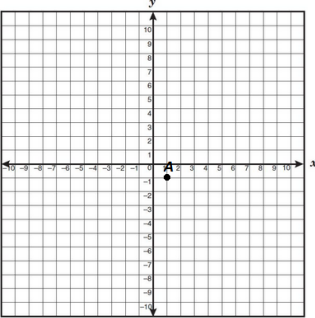
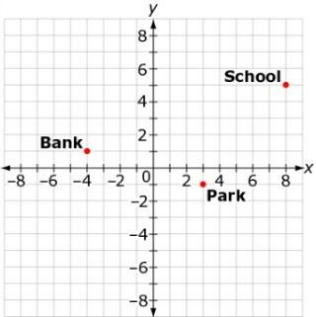
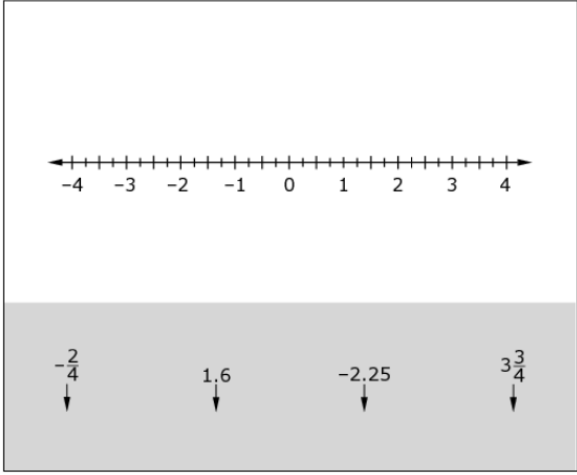


Content Standard	<p><b>MAFS.6.NS</b> <i>The Number System</i></p> <p><b>MAFS.6.NS.3</b> <i>Apply and extend previous understandings of numbers to the system of rational numbers.</i></p> <p><b>MAFS.6.NS.3.6a</b> Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., <math>-(-3) = 3</math>, and that 0 is its own opposite.</p> <p><b>MAFS.6.NS.3.6b</b> Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.</p> <p><b>MAFS.6.NS.3.6c</b> Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.</p> <p>Also Assesses:</p> <p><b>MAFS.6.NS.3.8</b> Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.</p>
Assessment Limits	<p>Numbers in items must be rational numbers.</p> <p>Plotting of points in the coordinate plane should include some negative values (not just first quadrant).</p> <p>Numbers in <i>MAFS.6.NS.3.8</i> must be positive or negative rational numbers.</p> <p>Do not use polygons/vertices for <i>MAFS.6.NS.3.8</i>.</p> <p>Do not exceed a <math>10 \times 10</math> coordinate grid, though scales can vary.</p>
Calculator	No
Item Types	<p>Equation Editor</p> <p>GRID</p> <p>Matching Item</p> <p>Multiple Choice</p> <p>Multiselect</p>
Context	Allowable
Sample Item	Item Type
What is the opposite of $-5$ ?	Equation Editor
What is the value of the $x$ -coordinate that is 9 units to the left of $(5, -8)$ ?	Equation Editor

Sample Item	Item Type
<p>Use the Add Point tool to graph <math>(-2.5, 0.5)</math> on the coordinate plane.</p> 	<p>GRID</p>
<p>A value <math>x</math> is shown on the number line.</p> <p>Drag the point to the number line to show the location of <math>-x</math>.</p> 	<p>GRID</p>
<p>A point <math>(a, b)</math> is shown on the coordinate grid.</p> <p>Drag the three points to their correct locations on the coordinate grid.</p> 	<p>GRID</p>

Sample Item	Item Type
<p>Point A is shown on the coordinate grid.</p> <p>Use the Add Point tool to plot four points that are all 7 units away from point A.</p> 	<p>GRID</p>
<p>A map of a town is shown.</p>  <p>The town wants to build a new library that is 5 blocks away from the park and 6 blocks away from the school.</p> <p>Use the Add Point tool to plot the location where the library should be built.</p>	<p>GRID</p>
<p>Four values are shown.</p> <p><math>-\frac{2}{4}</math>, 1.6, <math>-2.25</math>, <math>3\frac{3}{4}</math></p> <p>Drag each value to its correct location on the number line.</p> 	<p>GRID</p>

Sample Item	Item Type												
<p>The points <math>(4, -6)</math> and <math>(9, -6)</math> represent the location of two towns on a coordinate grid, where one unit is equal to one mile.</p> <p>What is the distance, in miles, between the two towns?</p> <div data-bbox="196 415 1404 470" style="border: 1px solid gray; height: 26px; margin-bottom: 5px;"></div> <div data-bbox="196 470 1404 512" style="border: 1px solid gray; padding: 2px;"><span>←</span> <span>→</span> <span>↶</span> <span>↷</span> <span>✖</span></div> <div data-bbox="196 512 1404 705" style="border: 1px solid gray; padding: 2px;"><table border="1" style="border-collapse: collapse;"><tbody><tr><td style="width: 20px; height: 20px; text-align: center;">1</td><td style="width: 20px; height: 20px; text-align: center;">2</td><td style="width: 20px; height: 20px; text-align: center;">3</td></tr><tr><td style="width: 20px; height: 20px; text-align: center;">4</td><td style="width: 20px; height: 20px; text-align: center;">5</td><td style="width: 20px; height: 20px; text-align: center;">6</td></tr><tr><td style="width: 20px; height: 20px; text-align: center;">7</td><td style="width: 20px; height: 20px; text-align: center;">8</td><td style="width: 20px; height: 20px; text-align: center;">9</td></tr><tr><td style="width: 20px; height: 20px; text-align: center;">0</td><td style="width: 20px; height: 20px; text-align: center;">.</td><td style="width: 20px; height: 20px; text-align: center;">-</td></tr></tbody></table></div>	1	2	3	4	5	6	7	8	9	0	.	-	<p>Equation Editor</p>
1	2	3											
4	5	6											
7	8	9											
0	.	-											