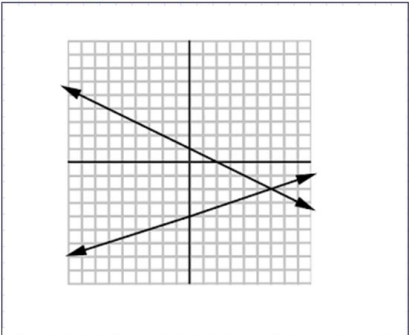
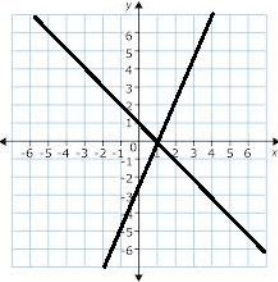
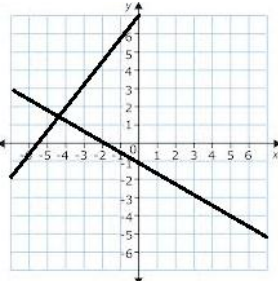
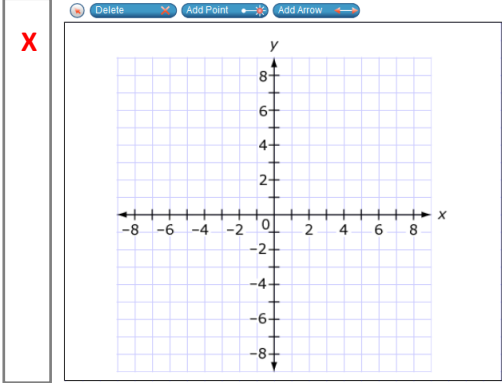


Content Standard	<p>MAFS.8.EE Expressions and Equations</p> <p>MAFS.8.EE.3 Analyze and solve linear equations and pairs of simultaneous linear equations.</p> <p>MAFS.8.EE.3.8 Analyze and solve pairs of simultaneous linear equations.</p> <p>MAFS.8.EE.3.8a Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.</p> <p>MAFS.8.EE.3.8b Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection. <i>For example, $3x + 2y = 5$ and $3x + 2y = 6$ have no solution because $3x + 2y$ cannot simultaneously be 5 and 6.</i></p> <p>MAFS.8.EE.3.8c Solve real-world and mathematical problems leading to two linear equations in two variables. <i>For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair.</i></p>	
Assessment Limits	Numbers in items must be rational numbers. Coefficients of equations in standard form must be integers. Items written for <i>MAFS.8.EE.3.8a</i> will include the graph. Equations used in items must be provided.	
Calculator	Yes	
Item Types	Equation Editor GRID Matching Item Multiple Choice Open Response	
Context	Allowable	
Sample Item	Item Type	
A graph of a system of two equations is shown. Use the Add Point tool to plot the solution of the system. 	GRID	

Sample Item	Item Type
<p>How many solutions does the system of two equations shown have?</p> $y = 3(x + 4)$ $y = 3(x - 4)$	<p>Open Response</p>
<p>A graph of a system of two equations is shown.</p>  <p>What is the solution of the system?</p> $x = \boxed{}$ $y = \boxed{}$	<p>Equation Editor</p>
<p>A graph of a system of two equations is shown.</p>  <p>What is the approximate solution of the system?</p> $(\boxed{}, \boxed{})$	<p>Equation Editor</p>
<p>What is the solution to the system of two equations shown?</p> $5x + 4y = 12$ $3x + 6y = 8$ <p>$(\boxed{}, \boxed{})$</p>	<p>Equation Editor</p>

Sample Item	Item Type
<p>A system of two equations is shown.</p> $y = 5x + 3$ $y = 4x - 5$ <p>A. Use the Add Arrow tool to graph the two lines. B. Drag the palette image to show the solution of the system.</p> 	<p>GRID</p>
<p>Radha is trying to choose between two bike rental companies, Company A and Company B.</p> <p>Company A charges a \$25 initial fee and an additional \$5 for each hour rented. Company B charges an initial \$18 fee and an additional \$6 for each hour rented.</p> <p>The total cost to rent a bike from Company A can be represented by the equation $y = 5x + 25$.</p> <p>The total cost to rent a bike from Company B can be represented by the equation $y = 6x + 18$.</p> <p>For how many hours of rental is the amount charged by the two companies the same? What is the cost, in dollars, of renting the bike for this many hours?</p> <p>Hours = <input type="text"/></p> <p>Cost = <input type="text"/></p>	<p>Equation Editor</p>
<p>Enter values for a and b, so that the system of equations shown has one solution.</p> $y = 3x + 4$ $y = ax + b$ <p>$a =$ <input type="text"/></p> <p>$b =$ <input type="text"/></p>	<p>Equation Editor</p>

Sample Item		Item Type		
Select the number of solutions for each system of two linear equations.		Matching Item		
	Zero solutions	One solution	Infinitely many solutions	
$2x + 2y = 3$ $4x + 4y = 6$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
$7x + 5y = 8$ $7x + 7y = 8$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
$-2x + 3y = 7$ $2x - 3y = -7$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	