

Name Key

Date \_\_\_\_\_

Mrs. Roubos

8R Period \_\_\_\_\_

Do Now

Solve the following systems of equations algebraically for both variables and check

<p>1) <math>2x + 5y = 19</math>  <math>y = 3x - 3</math></p> <p><math>2x + 5y = 19</math>  <math>2x + 5(3x - 3) = 19</math>  <math>2x + 15x - 15 = 19</math>  <math>17x - 15 = 19</math>  <math>+15 +15</math>  <hr/> <math>17x = 34</math>  <math>\frac{17}{17} \frac{34}{17}</math>  <math>x = 2</math></p>	<p><math>y = 3x - 3</math>  <math>y = 3(2) - 3</math>  <math>y = 6 - 3</math>  <math>y = 3</math></p> <p><math>(2, 3)</math></p>	<p>check #1</p> <p><math>(2, 3)</math>  <math>x, y</math>  <math>2x + 5y = 19</math>  <math>2(2) + 5(3) = 19</math>  <math>4 + 15 = 19</math>  <math>19 = 19</math></p>	<p>check #2</p> <p><math>(2, 3)</math>  <math>x, y</math>  <math>y = 3x - 3</math>  <math>3 = 3(2) - 3</math>  <math>3 = 6 - 3</math>  <math>3 = 3</math></p>
<p>2) <math>x = -y + 5</math>  <math>2x + 3y = 12</math></p> <p><math>2x + 3y = 12</math>  <math>2(-y + 5) + 3y = 12</math>  <math>-2y + 10 + 3y = 12</math>  <math>y + 10 = 12</math>  <math>-10 -10</math>  <hr/> <math>y = 2</math></p>	<p><math>x = -y + 5</math>  <math>x = -(2) + 5</math>  <math>x = -2 + 5</math>  <math>x = 3</math></p> <p><math>(3, 2)</math></p>	<p>check #1</p> <p><math>(3, 2)</math>  <math>x, y</math>  <math>x = -y + 5</math>  <math>3 = -(2) + 5</math>  <math>3 = -2 + 5</math>  <math>3 = 3</math></p>	<p>check #2</p> <p><math>(3, 2)</math>  <math>x, y</math>  <math>2x + 3y = 12</math>  <math>2(3) + 3(2) = 12</math>  <math>6 + 6 = 12</math>  <math>12 = 12</math></p>