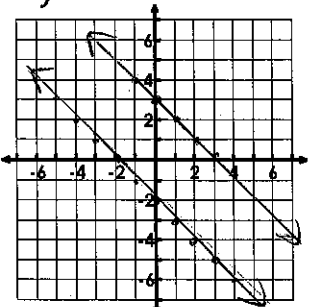
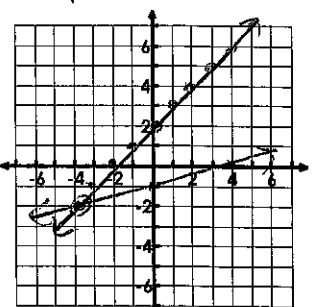
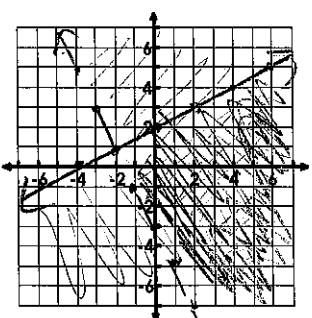


Name: Key

Date: \_\_\_\_\_

Use the following to review for you test. Work the Practice Problems on a separate sheet of paper if needed.

What you need to know & be able to do	Things to remember	Problem	Problem
Identify and apply the properties of equality.	Study your property sheet! Papers: 2.1 & 2.2	1. Which property is illustrated by the following: $\frac{6}{5} \cdot \frac{5}{6} = 1$ <i>Multiplicative Inverse</i>	2. What is an example of the transitive property? <i>If <math>a = b</math> &amp; <math>b = c</math>, then <math>a = c</math></i>
Find the solution of a system of linear equations by <b>graphing</b> .	<ul style="list-style-type: none"> <li>• Get "y" by itself.</li> <li>• Identify the slope (m) and the y-int (b)</li> <li>• <math>y = mx + b</math></li> <li>• Check your answer!</li> </ul>	3. $y = -x - 2$ $x + y = 3$ $y = -x + 3$ <i>No Solution</i> 	4. $y = x + 2$ $y = \frac{1}{4}x - 1$ 
Find the solution of a system of linear equations by <b>substitution</b> .	<ul style="list-style-type: none"> <li>• Solve one of the equations for a variable (either x or y).</li> <li>• Substitute into the other equation.</li> <li>• Plug back into the ORIGINAL!</li> <li>• Check your answer!</li> </ul>	5. $-7x + 8y = 6$ $x = -4y - 6$ $-7(-4y - 6) + 8y = 6$ $28y + 42 + 8y = 6$ $36y = -36$ $y = -1$ $(-2, -1)$	6. $8x + 2y = 16$ $x - y = 7$ $x = 7 + y$ $8(7 + y) + 2y = 16$ $56 + 8y + 2y = 16$ $10y = -40$ $y = -4$ $(3, -4)$
Find the solution of a system of linear equations by <b>elimination</b> .	<ul style="list-style-type: none"> <li>• Decide which variable you want to get rid of.</li> <li>• Make sure the coefficients are opposite</li> <li>• Add the two equations.</li> <li>• Solve for the variable.</li> <li>• Substitute back into the original.</li> <li>• Check your answer!</li> </ul>	7. $-2x - 8y = 6$ $x + 6y = -6$ <hr/> $-2y = 0$ $y = 0$ $2x + 0 = -6$ $2x = -6$ $x = -3$ $(-3, 0)$	8. $12x - 8y = 12$ $-2(6x - 7y = -12)$ <hr/> $12x - 8y = 12$ $-12x + 14y = 24$ <hr/> $6y = 36$ $y = 6$ $(5, 6)$ $12x - 8(6) = 12$ $12x - 48 = 12$ $12x = 60$ $x = 5$

<p>Find the solution of a system of linear equations by <b>the best method</b>.</p>	<ul style="list-style-type: none"> <li>• Check if a pair is already opposite for elimination.</li> <li>• Check to see if either equation is already solved for a variable for substitution.</li> <li>• Check to see if the equations are already in slope-intercept form.</li> </ul>	<p>9. <math>-3x + y = 17</math> <math>y = 3x + 17</math>  <math>8x + 7y = 3</math>  <math>8x + 7(3x + 17) = 3</math>  <math>8x + 21x + 119 = 3</math>  <math>29x + 119 = 3</math>  <math>29x = -116</math>  <math>x = -4</math>  <math>(-4, 5)</math></p>	<p>10. <math>3(3x - 3y = -3)</math>  <math>-5x + 9y = 29</math>  <math>9x - 9y = -9</math>  <hr/> <math>4x = 20</math>  <math>x = 5</math>  <math>(5, 6)</math></p> <p><math>15 - 3y = 3</math>  <math>-3y = 18</math>  <math>y = 6</math></p>
<p>Solving a System of Linear Equations Word Problem</p>	<ul style="list-style-type: none"> <li>• Define x and y.</li> <li>• Set up two equations.</li> <li>• Decide the best method.</li> <li>• Solve.</li> <li>• End with words!</li> </ul>	<p>11. Amy's school is selling tickets to a choral performance. A senior citizen's ticket is \$6 and a child's ticket is \$15. If they made \$810 dollars and sold a total of 72 child and senior citizen tickets, how many of each ticket did they sell?</p> <p><math>6s + 15c = 810</math>  <math>-6(s + c = 72)</math>  <math>-6s - 6c = -432</math>  <hr/> <math>9c = 378</math>  <math>c = 42</math>  <math>s = 30</math></p>	<p>12. The band is selling wrapping paper for a fundraiser. Customers can buy rolls of plain wrapping paper and rolls of shiny wrapping paper. The band sold a total of 55 rolls and made \$950. If a roll of plain costs \$14 and a roll of shiny costs \$20, how many rolls of each did they sell?</p> <p><math>20s + 14p = 950</math>  <math>-20(s + p = 55)</math>  <math>-20s - 20p = -1100</math>  <hr/> <math>-6p = -150</math>  <math>p = 25</math>  <math>s = 30</math></p>
<p>Graphing a system of linear inequalities.</p>	<ul style="list-style-type: none"> <li>• Make sure both equations are in slope-intercept form.</li> <li>• Decide if the lines will be solid or dashed.</li> <li>• Graph the lines.</li> <li>• Test a point- typically (0,0).</li> <li>• Shade appropriately.</li> </ul>	<p>13. <math>y &gt; -2x - 3</math>  <math>y \leq \frac{1}{2}x + 2</math></p> 	<p>14. <math>y \leq x + 1</math>  <math>y &lt; -x - 3</math></p> 