






Name _____

Unit 6 Study Guide

<p>Words to Expressions</p> <table border="1"> <tr> <td style="text-align: center;">+</td> <td> <p>and more plus adds deposit increase</p> <p>all together total sum</p> </td> <td style="text-align: center;">-</td> <td> <p>less than take away subtract minus withdraw decrease take away</p> </td> </tr> <tr> <td style="text-align: center;">x</td> <td> <p>times multiply product of</p> <p>per for each twice triple squared</p> </td> <td style="text-align: center;">÷</td> <td> <p>dividend divided by divisor groups for each</p> </td> </tr> </table>		+	<p>and more plus adds deposit increase</p> <p>all together total sum</p>	-	<p>less than take away subtract minus withdraw decrease take away</p>	x	<p>times multiply product of</p> <p>per for each twice triple squared</p>	÷	<p>dividend divided by divisor groups for each</p>	<p>3 less than twice a number</p> <p style="text-align: center;">$2a - 3$</p> <p>5 more than a number divided by 3</p> <p style="text-align: center;">$\frac{a}{3} + 5$ $a \div 3 + 5$</p> <p>a number times 5 add 7</p> <p style="text-align: center;">$5a + 7$</p>	
+	<p>and more plus adds deposit increase</p> <p>all together total sum</p>	-	<p>less than take away subtract minus withdraw decrease take away</p>								
x	<p>times multiply product of</p> <p>per for each twice triple squared</p>	÷	<p>dividend divided by divisor groups for each</p>								
<p>Two Step Equations</p> <p style="text-align: center;">Opposite operation</p> <p style="text-align: center;">Starting with the number by itself</p>		<p>$5x - 7 = 13$</p> <p style="text-align: center;">$5x = 13 + 7 = 20$</p> <p style="text-align: center;">$x = 20 \div 5$</p> <p style="text-align: center;">$x = 4$</p> <p>$x/3 + 2 = 7$</p> <p style="text-align: center;">$x/3 = 7 - 2 = 5$</p> <p style="text-align: center;">$x = 5 * 3$</p> <p style="text-align: center;">$x = 15$</p>									
Inequality	Meaning of Symbol	Word that mean symbol	Type of circle used when graphing								
>	greater than	more over higher									
<	less than	less under lower									
≥	greater than or equal to	at least									
≤	less than or equal to	no more than									
<p>Data Set</p> <p style="text-align: center;">a set of numbers usually represented within brackets $\{3, 4, 5, 6, 7\}$</p>											

<p>Graphing Inequalities</p> <p>choose a type of circle</p> <p>place it on a number line</p> <p>draw the arrow in the direction that the sign points</p>	<p>Graph the inequality $y < 7$</p>  <p>Which numbers in this data set satisfy the inequality?</p> <p>{ 3, 5, 6, 7, 9, 10 }</p>								
<p>Solving Inequalities</p> <p>opposite operation</p> <p>sign stays the same</p>	<p>Solve the inequality $y - 5 \geq 9$</p> <p>$y \geq 9 + 5$</p> <p>$y \geq 14$</p> <p>Name 3 values that satisfy the inequality.</p> <p>14, 17, 20</p>								
<p>Satisfying Multiple Inequalities</p> <p>Solve both inequalities</p> <p>find answers that would work for both</p>	<p>$x - 4 > 5$</p> <p>$6x \leq 72$</p> <p>$x > 5 + 4$ $x \leq 72 \div 6$</p> <p>$x > 9$ $x \leq 12$</p> <p>$9 < x \leq 12$</p> <p>Name 3 numbers that would satisfy both inequalities.</p> <p>10, 11, 12</p>								
<p>Patterns and Tables</p> <p>Find the rule</p> <p>What do you have to do to the x to get the y</p> <p>Check + and -, AND x and ÷</p> <p>If one step doesn't work, then check for two</p>	<p>Study the table below.</p> <table border="1" data-bbox="816 1383 1386 1524"> <thead> <tr> <th>x</th> <th>y</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>10</td> </tr> <tr> <td>4</td> <td>13</td> </tr> <tr> <td>5</td> <td>16</td> </tr> </tbody> </table> <p>What is the rule for the table?</p> <p>$x3 + 1$</p> <p>What is the equation for the table?</p> <p>$y = 3x + 1$</p>	x	y	3	10	4	13	5	16
x	y								
3	10								
4	13								
5	16								

Equations to Graphs

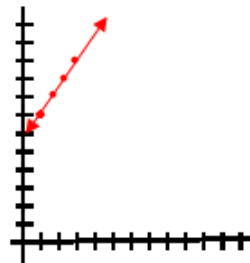
Make a t-chart for x and y

Plot the points on a coordinate plane

Draw a line through the points

$$y = x + 6$$

x	y
1	7
2	8
3	9
4	10



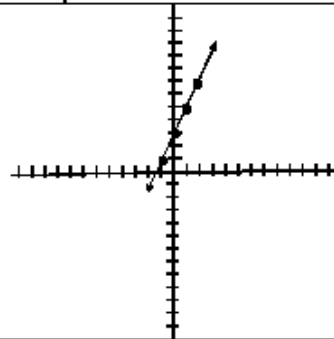
Equations from Graphs

pick three points

make a t-chart for those points

figure out the pattern (the rule)

make the equation from the rule



x	y
-1	1
0	3
1	5
2	7

$$x^2 + 3$$

Write the equation for the line.

$$y = 2x + 3$$

Using Graphs to Estimate Data

Find the point on the graph

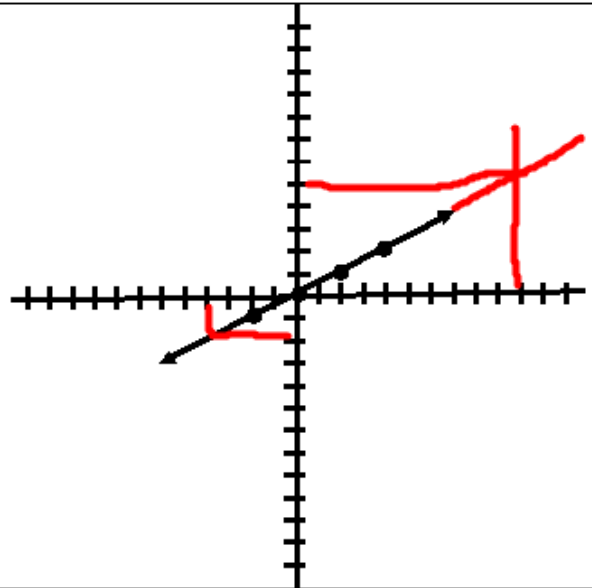
Extend the line if necessary

What is the value of y if $x = -4$?

-2

What is the value of y if $x = 10$?

5



My student studied for at least 30 minutes.

Parent Signature _____ Date _____