

Name _____

Date _____

Homework #16

Period _____

Tic-Tac-Toe Assignment

Directions: Create tic-tac-toe by choosing three problems to answer. You may go horizontal/vertical or diagonal. Each is worth 3 points for a total of 9 points plus one point for getting tic tac toe. All work can be on back or extra sheet of paper.

You may do more for extra credit.

<p style="text-align: center;">Equivalent Equations</p> <p>Explain in words why the following two equations are equivalent. Show your work to justify your answer.</p> <p>Equation #1: $2x + 8 = 14$</p> <p>Equations #2 $2(x + 4) = 14$</p>	<p style="text-align: center;">Simplifying Expressions</p> <p>Write three expressions that can be simplified. At least one should use the distributive property.</p> <p>Then write the verbal translation for each of them.</p> <p>Be creative!!</p>	<p style="text-align: center;">Writing/Solving</p> <p>Renee has a jewellery business, she charges \$15 for the activity and it is an additional \$2 for each button.</p> <p>a) Write an equation that represents the cost given that x is the number of buttons chosen.</p> <p>b) Create three different totals and solve to find the number of buttons.</p>
<p style="text-align: center;">Writing Expressions</p> <p>Given the following expressions write them in words:</p> <p>a) $-3(x + 4)$</p> <p>b) $x^2 - 8$</p> <p>c) $15 + \frac{1}{2}x$</p> <p>d) $7x^2$</p>	<p style="text-align: center;">Writing/Solving Equations</p> <p>Write and solve 5 different equations. For each equation use the given property:</p> <ol style="list-style-type: none"> 1) Addition 2) Parenthesis 3) Fraction 4) Subtraction 5) A combination of any 2 	<p style="text-align: center;">Expressions and Perimeter</p> <p>Write three different expressions that would be used to find the perimeter of the rectangle below. Use each to solve for x if the perimeter was 42.</p> <div style="text-align: center;">  </div>
<p style="text-align: center;">Simplifying Expressions</p> <p>Find the error and show the correct work for each of the following:</p> <p>a. $x^2 + 3x - (4x - 5) = x^2 + x - 5$</p> <p>b. $5z + 3(x - 2) = 5z + 3x - 2$</p> <p>c. $5x(6x + 2) = 30x + 10$</p>	<p style="text-align: center;">Writing/Solving Word Problems</p> <p>Write a word problem that you can use to write a two-step or multi-step equation. Define the variable and solve the equation. Write the solution to the problem in a complete sentence.</p>	<p style="text-align: center;">Equivalent Equations</p> <p>Create four equivalent equations and explain how they are all equivalent. <i>Remember equivalent means equal to.</i></p>