

# Expressions & Equations

DIRECTIONS: Choose activities from the project board below that equal 10 points or more.

1 Point Projects	5 Point Projects	3 Point Projects
<p><b>Equivalent or Not?</b> Sarah thinks that the following expressions are equivalent (equal): <math display="block">2x + 3 = x \div 2 + \frac{3}{4}</math> Is she right? If so, prove that these two expressions are equal. If not, what error(s) did she make?</p>	<p><b>Boggle</b> Create your own linear expressions boggle game where players have to combine like terms. Then create fifteen problems using at least two boxes per question. Don't forget to solve</p>	<p><b>Maze</b> Create your own linear expressions maze where players must successfully combine the correct one and two variable expressions in order to reach the end of the maze. Your maze should include a minimum of 10 expressions. Include a key that shows the correct route.</p>
<p><b>True or False Quiz</b> Create a 5 problem true or false quiz where students have to identify the correct algebraic expression or equation to solve real-world word problems.</p>	<p><b>Centers</b> Your teacher needs your help creating 2 engaging and fun centers where students practice solving real-life and mathematical problems using numerical and algebraic expressions and equations. For each center, you will need to write step-by-step directions, create all worksheets/handouts/games, and make answer keys</p>	<p><b>Foldable</b> Design a foldable where students practice writing algebraic expressions and equations in order to solve real-world problems. Your foldable must include at least 7 problems. Don't forget to create an answer key where you show all the steps to solving each problem!</p>
<p><b>Tic-Tac-Toe</b> Construct your own nine section tic-tac-toe board where players earn a square by solving real-life and mathematical problems posed with positive and negative rational numbers in any form. Don't forget to include a key.</p>	<p><b>Sales Commission Table</b> You are a car salesman and make a 15% commission on each car you sell before taxes. Look up the prices of 10 different cars online or in your local newspaper. What would be your commission for each car? Create a table that includes the car make/model, cost, and potential commission of each car.</p>	<p><b>Best Choice Game</b> Everyone loves to get a good deal, especially when traveling. Create a game where players have to choose the cheapest taxi to take in order to get to their final destination. Write at least 8 question cards where players have to choose between two cab companies based on information provided (i.e. initial cost, cost for each <math>\frac{1}{4}</math> mile, airport rate, expected tip, etc.) Don't forget a key.</p>

