

Variable Scramble

Use with: Math by Myself or Math with Someone

Concept	To determine whether a group of objects has an odd or even number of members.
Materials Needed	Represent a problem as an equation with a letter standing for the unknown quantity. Solve, using a self-selected strategy, to find the value of the unknown number.
Directions	Each student/pair of students will need: <ul style="list-style-type: none"> • Two, six-sided dice • Solving for an Unknown Number Activity Sheet (copied front-to-back) • pencil
Differentiate	Students will independently or in pairs write and solve the equations. <ol style="list-style-type: none"> 1. Replace the \square, which represents an unknown number, as a variable (a letter that holds the place for an unknown number) for each equation. It is important that students understand that a variable can be represented by any number, but in algebra variables are most often represented by x or y. 2. Roll 1 of the die, record the value in the first blank For example, let's say I roll 1 die and it lands on 5. I would record my equation as: $R + 5 = \underline{\quad}$ 3. Now, roll the pair of dice. Add the value of the dice together. Record this new value in the second blank. For example, let's say I roll the pair of dice and 1 die lands on 4 and the other lands on 2. If I add $4 + 2$, my total value equals 6. So, I would record my equation as: $R + 5 = 6$ 4. Using a self-selected strategy, students will solve to find the value of the unknown number. The work is recorded in the strategy section of the recording sheet. 5. Record the value of the unknown number in the Variable Value column of the recording sheet (In the example $R = 1$)