Lesson 25: Finding Solutions to Make Equations True

Classwork

Opening Exercise

Identify a value for the variable that would make each equation or inequality into a true number sentence. Is this the only possible answer? State when the equation or inequality is true using equality and inequality symbols.

Example 1

Each of the following numbers, if substituted for the variable, makes one of the equations below into a true number sentence. Match the number to that equation: , , , , .

Lesson Summary

**Variable:** A *variable* is a symbol (such as a letter) that represents a number (i.e., it is a placeholder for a number).

A variable is a placeholder for “a number” that does not “vary.”

**Expression:**  An *expression* is a numerical expression or a result of replacing some (or all) of the numbers in a numerical expression with variables.

**Equation:**  An *equation* is a statement of equality between two expressions.

If and are two expressions in the variable , then is an equation in the variable .

Problem Set

Find the solution to each equation.