

Teaching the Concept of Variables

Materials:

- 3 clear plastic cups
- Countables, such as marbles
- Cut outs of =, -, and + signs
- Cut outs of different letters to use for variables (x, n, b, etc.)
- Tape

Steps:

- Line the 3 cups in a row
- Put 4 marbles in the first cup
- Put 10 marbles in the 3rd cup
- Tape a variable (x) to the middle cup
- Put a + sign between the 1st and 2nd cups
- Put an = sign between the 2nd and 3rd cups

Explain to the students that the middle cup is a variable; in this case it is represented by the letter x , but it could be represented by any letter.

Tell them that it is called a variable because its actual number depends on how many marbles are in the 1st and 3rd cups, so it varies.

Now, have a student come up and put the correct amount of marbles needed in the variable cup to make the equation work.

In this case, the answer is six, so $x = 6$.

Use various examples by switching things up. For example, you could make the first cup the variable and change the + sign to a -.

Also, you can change the x to an n , b , etc. so the students will see that variables can be represented by anything.

