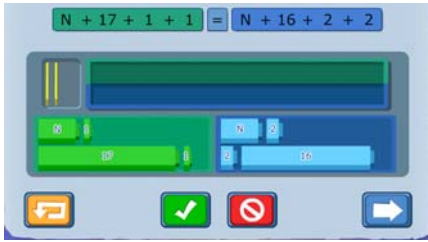


Equivalence up to Twenty



The interactive white board tool for this lesson can be found on our website under Resources and Teacher Tools. (www.dreambox.com/teachertools)

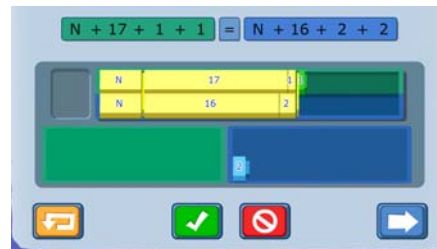
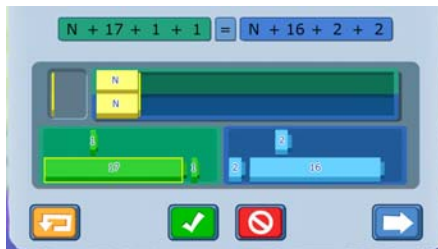
In this DreamBox lesson, students will use two expressions that have one to three addends to engage students in understanding various number pairs that equal twenty.

Sample Lesson

Objective: Students use snap blocks to determine if two expressions are equivalent.

Background: Students should have automaticity up to 20 and a basic understanding of variables. (ie. two of the same variable represent equivalent values)

Instruction:



1. Begin by reviewing variables and asking students the following question:
 - What is a variable? (A: an letter that represents a number)
 - Can a variable represent any number? (A: yes)
 - Do two variables that are the same letter also represent the same number? (A: yes)
2. Once students have had a chance to discuss the questions as a class, invite one student to come to the board and create an equivalent amount on both the top and bottom rows. Then have the student explain how they determined the blocks were equivalent.

Possible answers:

 - I chose the two letters (variables) because they have the same number (value).
 - I chose 17 and 1 for one amount and then 16 and 2 for the other, because they both equal 18.
 - I chose 1 and 1 on the top and 2 on the bottom because they both equal 2.
3. Ask another student to come create a second equivalent equation (if possible) and explain how they determined the equivalence. Repeat this step until there are not more possibilities. Then have the students explain why the expressions are (or are not) equivalent.

Possible Answers:



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- They (the expressions) are the same because all of the snap blocks were used and they lined up.
 - I created 2/3/4 sets of equal amounts so they expressions are equal.
 - The expressions are not equal because the last set did not line up.
4. Repeat the steps from above giving multiple students the opportunity to participate.
 5. As an alternative, this activity can be used in centers and the explanations can be written in the students' math journal.