Equivalent Fractions

Grade Level: 4th Grade
Subject: Math
CT Concept: Algorithms

STANDARDS

CCSS.Math.Content.4.NF.A.1
Explain why a fraction a/b is equivalent to a fraction (n × a)/(n × b) by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.

MATERIALS / CURRICULUM

I will be using the Math Expressions workbook pages 239-240 and big student white boards.

LESSON DESCRIPTION

Intro:

Students write the Learning Target in their math notebooks. -I can find equivalent fractions by using a model and an algorithm.

- Vocabulary: Equivalent Fraction, Algorithm-- Students write vocab and definitions in their notebooks.

Body:

Teacher gives examples of word problems and fraction bars to find equivalent fractions. "If I have 1/3 of a pizza and I want to split my section into 3 more pieces, what is the value of each of those 3 pieces?

- What is the equivalent fraction to 1/3?
- Today we're going to write an algorithm for finding equivalent fractions.
- Can someone remind me what an algorithm is?
- In order to be more efficient, we are going to create an algorithm to find equivalent fractions.
- Go over the definition of an algorithm.
- We are going to write an algorithm together for the function machine on our calendar this month. Who remembers what the function is? How could we write and algorithm for this function? Step 1: Insert a whole number (color black) in to the function machine. Step 2: Multiply that number by 3. Step 3: And 1 to the answer of step 2. Step 4: The answer pops out of the machine (color red). 1x3+1=4 2x3+1=7
- In your table groups, on the big white board, I want you to try and come up with a step by step method for finding an equivalent fraction.
- Be prepared to share your algorithm with the class in 10-15 minutes. You will switch your algorithms with another team so they can test your algorithm to see if it works!
- Table groups work together to find an algorithm for equivalent fractions, then share their work with the class. a/b= (nxa)/(nxb) Teacher will collect white boards.
- Write independent practice pages on the board (pages 239-240).

Equivalent Fractions

Close:
Teacher goes over learning target, uses sticks to have students explain what was learned. Pass out exit ticket. Accommodations: If students get stuck when writing algorithms, I can help them by giving them key words for each step.

ASSESSMENT PLAN

I will assess student learning by an exit ticket. Find an equivalent fraction using a model and an algorithm for 6/8.

ACCOMMODATIONS

A- will go to Rm 5 for math B- will complete math assignment in Rm 5 C- will not participate in group lesson- will complete assignment on his own in back of the room. D, E, F (and other who need extra support) will work with teacher in the back of room on assignment.