## Today's Lesson: To recognize and write algebraic equations.

Operations and Algebraic Thinking, 4th Grade. (Interpret a multiplication sentence as a CCSS comparison. Represent verbal statements of multiplicative comparisons as multiplication equations.) 4.OA. 1

## Focus Lesson 1

(I do) Begin the lesson by posing the following scenario: "Alec is $x$ years old. In 10 years, he will be 18."

The teacher will then write the following on the board or chart paper, and read aloud to the students: "I am going to write an algebraic equation. We learned before that a variable is our 'unknown' information. When we don't know one of the numbers, we use an ' $x$ ' to stand for the unknown number. Since I don't know how old Alec is, I will use an ' $x$ ' to stand for his age. We know that in 10 years, he will be 18. I already have the ' $x$ '. I will add 10 to the $x$ $(x+10)$ and have that equal 18. $(x+10=18)$ This is how to write an algebraic equation.

## Round of Daily 3 Math

The teacher will hand out different sentences to pairs of students.

Focus Lesson 2
(We do)

Examples are:
5 less than a number is 15 .
3 more than a number is 25 .
A number increased by 3 is 18 .
The teacher will say, "We have practiced identifying what an algebraic equation looks like. Today we are practicing writing them. You are going to work with a partner. You and your partner are going to read the sentence that is given to you. Then you will write the algebraic equation for the sentence."

The teacher will allow students time to discuss and write the equation with an elbow buddy. The students will remember to use ' $x$ ' as their variable. The teacher will have pairs of students come up to the board to read their sentence and present their algebraic equation.

## Round of Daily 3 Math

Present students with the following story problem:
Focus Lesson 3 (You do)
"Allie has $\$ 37.02$ saved in her bank account. She wants to buy a new bike that costs $\$ 86.00$. How much money does she still need to save to buy her new bike?"

The teacher will give each student a blank paper. The teacher will ask the students to write an algebraic equation for the story problem. The student will also be asked to explain what a 'variable' is.

## Student Sharing

