Math Translation

Once students have practiced the algorithm and can complete it fairly regularly, math translation is a tool to help them deepen their understanding of the process.

Writing an explanation of a process leads to a better understanding of the process.

—Mark Forget,
teacher, author
MAX Teaching with Reading and Writing

Two-Step Equations	**Solve**
How students would normally solve **two-step equations** using the algorithm…	3x + 5 = 26 - 5 - 5 3x = 21 ÷3 ÷3 x = 7

When students have nearly mastered the algorithm, ask them to "work" one or two of the problems without using any numbers or symbols. Ask them to write out the steps. In writing out the steps, they will translate the math into words.

A student sample appears on the next page.

Solve	Math Translation
$3x + 5 = 26$ $-5 \quad -5$ $3x = 21$ $\div 3 \quad \div 3$ $x = 7$	A two-step equation is given. Two operations are involved. One is addition, and the other is multiplication. To get the variable all by itself, you first use the inverse operation of addition (subtraction) by taking five away from both sides. Now the variable is almost all alone on the left side, but it is still multiplied by three. So, you again use an inverse operation (division this time) to get the variable all by itself. Anything you do to one side, you have to do to the other side as well, so you divide both sides by three. The equation is then solved because you have an x on one side and a seven on the other side. The answer is x equals seven.