OPERATION SENSE

Name: "Another Way to Say It" **Type:** Routine

About the Routine: Intuitively knowing that subtraction can be thought of as "add the opposite" is a notion about positive and negative numbers that students simply must know. After establishing this concept, you want to provide practice opportunities so that students use this effortlessly.

Materials: Prepare a few subtraction expressions involving negative numbers

Directions:

1. Pose three or four expressions.
2. Students first think about another way to say the expression in terms of adding the opposite.
3. The group confirms the new addition expression.
4. Then, students think of another way they might think about the expression, or another way to say it.
5. Students decide which way they say it lends to solving it.

Optional: pick one way to say it and use that form to solve the problem. Note that the goal of the routine is not to find the solution but to instead focus on alternative ways to think about the expression.

For example, four expressions are posed. For the first problem, students agree that another way to say the first expression is $^{-}89 + {}^{-}17$. Then, they discuss *other ways* to say the expression. One student says, "You can say it as $^{-}90 + {}^{-}16$." Another says, "You can say it as $^{-}80 + {}^{-}10 + {}^{-}9 + {}^{-}7$." A third say, "You can say it as -89 + -20 and then take $^{-}3$ off." The teacher records the ideas and asks students, "Which way would you select to solve this problem?"

Another Way to Say It			
$^{-}89 - 17$	$63 - {}^{-}24$	$^{-}38 - 94$	$14 - {}^{-}23$

This routine can be modified to focus on other skills or reasoning strategies. For example, you can create expressions for students to practice the Make a Zero strategy. In the first expression below, students might say that another way to say $^{-}64 + 72$ is to say $^{-}64 + 64 + 8$.

Another Way to Say It		
$^{-}64 + 72$	$^{-}13 + 75$	$21 + {}^{-}52$