

Add Integers Maze - Clarification & Examples

The front side, with the addition problems, is the main concern for the homework. The back side, with the maze, is for students to check to see if they added the integers correctly. The rule for adding integers that I believe students learned in middle school is "Same sides add and keep; different signs subtract - keep the sign of the bigger number, then you'll be exact." It is a rhyming way to remember how to add positive and negative numbers. It is written on the top of the front side of the homework. Here are a few examples.

$51 + (-20) = 51 - 20 = 31$ In this case, 51 is the "bigger" number and is positive, so the final answer is positive. You can also think about having \$51, and then you get a bill in the mail for \$20, so you have to pay that, so you have to take away \$20 from your \$51, and you still have \$31 left.

$(-20) + 51 = 51 - 20 = 31$ The rule is still the same here. You could think about having a \$20 bill that you owe, so when you get paid \$51, you really only have \$31 left because you had to pay your bill.

$(-51) + 20 = -31$ In this case, -51 is the "bigger" number and is negative, so the final answer is negative. You owe \$51, so even though someone just gave you \$20, you still have a \$31 debt.

$20 + (-51) = -31$ The rule is still the same here. You have \$20, but a bill bigger than what you have shows up in the mail, so you still owe \$31 even after you have paid your \$20 towards the bill.

$(-20) + (-51) = -71$ In this case, both numbers are negative, so you add and keep the negative sign. You get two different bills in the mail, one for \$20 and one for \$51. You have to pay them both, so your total debt is \$71.

The maze is simply for students to see whether they got their answers right. When they start at the Begin box, their answer for #1 on the front side of the page should lead them to the next box, and so on, until they reach the End box by following their answers from the front side. If their answers on the front are all correct, then when they follow the maze, they should reach the End box.