Integer Operations Review

Adding Integers

Think of each question as adding points won or list in a game.

Example: *4 + -5*
Think: I score 4 points, and then I lose 5 points. My score is -1.
4 + -5 = -1

Example: *-3 + -7*
Think: I lost 3 points, and then I lost another 7 points. My score is – 10.
-3 + -7 = -10

Subtracting Integers

Every subtraction can be changed to an addition.

Rule: Change subtraction to addition and change the sign of the 2nd number.

Example: *6 – -4*
Write: 6 – -4 = 6 + 4 = 10

Example: *-4 - 5*
Write: -4 - 5 = -4 + -5 = -9

Multiplying and Dividing Integers

Rule: If the signs are the same, the answer is positive. If the signs are different, the answer is negative.

Example: -2 x -4
The signs are the same so the answer is positive. -2 x -4 = 8.

Example: 15 ÷ -5
The signs are different so the answer is negative. 15 ÷ -5 = -3.

Order of Operations (BIMA)

The order of operations is

B rackets
I ndices
M ultiplication and Division, left to right
A ddition and Subtraction, left to right

Example: 3 + -2 x 5
Multiply before adding, so 3 + -2 x 5 = 3 + -10 = -7

Example: (3 + -2) x 5
Do operation in brackets before multiplying, so (3 + -2) x 5 = 1 x 5 = 5