

Integers

Positive and negative whole numbers and zero (… -3, -2, -1, 0, 1, 2, 3 …) Adding and Subtracting Integers

1) Change subtracting to adding the opposite. SMATO Subtract Means Add The Opposite 7 and -7 are opposites -5 and 5 are opposites -3 – (-5) becomes -3 + (+5) 7 – 11 becomes 7 + -11 (or think of the subtraction sign being a negative on the 11) 2) Decide whether the answer will be positive, negative or zero, and write it down! If the numbers are opposites (4 + -4, -8 + 8, 10 + -10), then the answer is zero. The larger number's sign rules. Positive Answer Negative Answer

$7 + 13$	$7 + -13$	$9 + 5$	$4 + 4$
$-7 + 13$	$7 + -13$	$-9 + 5$	$4 + -4$

If the signs are the same, find the sum. Ignore the signs and add the numbers. $-11 + -5 = -16$ $2 + 8 = 10$ $-13 + -5 = -18$
 If the signs are different, find the difference. Ignore the signs and do big minus little. $-5 + 12 = 7$ $-9 + 5 = -4$
 $16 = -10$

Multiplying and Dividing Integers 1) Decide whether the answer will be positive, negative, or zero, and write it down. -----
 -----Zero if one of the factors is zero, the whole answer is zero. $(45)(-64)(0)(2) = 0$ If you try to divide by zero, there is no solution. $(-82)/0 = \text{no solution}$ $3/0 = \text{no solution}$ -----
 ----- Count the number of negatives. An even number of negatives gives a positive answer. $(-3)(-2)(-1)(2)(-3) = + \text{ answer}$ (because there are 4 negatives) $(5)(-2)(-3) = + \text{ answer}$ (because there are 2 negatives) An odd number of negatives gives a negative answer. $(-5)(6) = - \text{ answer}$ because there is one negative $(3)(-7)(-1)(-2) = - \text{ answer}$ because there are 3 negatives ----- 2)
 Ignore the signs, and multiply and divide the numbers. $(-3)(-2)(-1)(2)(-3) = 36$ $(-5)(6) = -30$ $(5)(-2)(-3) = 30$ $(3)(-7)(-1)(-2) = -42$ Looking for a tutor in Santa Cruz, Capitola, or Scotts Valley, California? Please check my "current openings" page to see if I am accepting new students.