Rules of Signed Numbers (p=positive and n=negative)

Addition	Clarification
P + P = P or N + N = N 1. Add the absolute value of the two numbers 2. Keep the sign P + N or N + P 1. subtract the absolute values of the two numbers 2. Take the sign of the larger absolute value	We all grew up working with things like 7-2 = 5 *Seven minus two equals five* But in reality it is 7 + -2 = 5 *Seven plus a negative two equals a five.*

Perhaps the best way to add positive and negative numbers is to think in terms of money. Just recall the little computer print-out slip you get after an ATM transaction, or your monthly bank or credit card statement which was printed via a computer.

Positive sign means you have money in your account/pocket or is money that is being paid to you.

Negative sign is money that is being taken from you or money that you owe somebody.

Examples:

1. 22 + 33 = 55
   Explanation: If you have $22 in your account to begin with, and today you deposit $33, the end balance is $55. This is exactly what the computer will tell you.

2. 33 + (-4) = 29
   Explanation: if you have $33 in your pocket, and you pay somebody $4, your remaining money is $29.

3. –31 + (-11) = -42
   Explanation: If you owe your mom $31 and you owe your dad $11, overall you are in debt to your parents by $42. Since you owe money, the result is negative.

4. –5555 + 4 = -5551
   Explanation: If you owe the government $5,555 and today you pay them $4, you still owe the government $5,551. Once again, since you owe money, the result is negative

5. 20 + (-30) = -10
   If you have 20 dollars in the bank and you write a check for $30, you owe the bank $10. Since you owe money, the result is negative.

Multiplication		**Division**		
(p)(p) = p	(3)(4) = 12	(p) ÷ (p) = p	$\frac{p}{p} = p$	(10) ÷ (2) = 5
(n)(n) = p	(-3)(-4) = 12	(n) ÷ (n) = p	$\frac{n}{n} = p$	(-10) ÷ (-2) = 5
(n)(p) = n	(-3)(4) = -12	(n) ÷ (p) = n	$\frac{n}{p} = n$	(-10) ÷ (2) = -5
(p)(n) = n	(3)(-4) = -12	(p) ÷ (n) = n	$\frac{p}{n} = n$	(10) ÷ (-2) = -5

Multiplying/Dividing two numbers with like signs: positive result
Multiplying /Dividing two numbers with unlike signs: negative result