Negatives

Adding	Subtracting	Multiplying	Dividing
(+)+(+)=(+)	(+)-(+)=(+)	(+)x(+)=(+)	(+)÷(+)=(+)
(-)+(-)=<(-)	(-)-(-)=(-)+(+)	(-)x(-)=(+)	(-)÷(-)=(+)
(+)+(-)=(-+)-(+)	(+)-(-)=(-)+(+)	(+)x(-)=(-)	(+)÷(-)=(-)
(-)+(+)=(-+)+(-)	(-)-(+)=(-)+(+)	(-)x(+)=(-)	(-)÷(+)=(-)

Properties

Commutative	Associative	Identity	Inverse
commutative property states that the numbers on which we operate can be moved or swapped from their position without making any difference to the answer	associative property is a property of some binary operations	identity is an equality relating one mathematical expression to another	Inverse means the opposite in effect

Fractions

Adding	Subtracting	Multiplying
Find a common denominator. Add the numerators (and keep the denominator) Simplify the fraction.	Make sure the bottom numbers (the denominators) are the same. Subtract the top numbers (the numerators). Put the answer over the same denominator. Simplify the fraction (if needed)	Multiply the two numerators. Then multiply the two denominators. Simplify the new fractions.

Tools

PI	3.1415926535897-932384626433-83279502
Place Value	M HTH TTH T H T O . 1/10 1/100 1/1000
Order of Operation	Brackets, Parentheses, Exponents, Add-Subtract, Multiply-Divide
Area	B·H=A
Volume	B·H·W=V
Prime (1-100)	2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89, 97...
Composite (1-100)	4, 6, 8, 9, 10, 12, 14, 15, 16, 18, 20, 21, 22, 24, 25, 26, 27, 28, 30, 32, 33, 34, 35, 36, 38, 39, 40, 42, 44, 45, 46, 48, 49, 50, 51, 52, 54, 55, 56, 57, 58, 60, 62, 63, 64, 65, 66, 68, 69, 70, 72, 74, 75, 76, 77, 78, 80, 81, 82, 84, 85, 86, 87, 88, 90, 91, 92, 93, 94, 95, 96, 98, 99, 100
Square Root	x2 = y
Denominator	Bottom number of a fraction
Numerator	Top number of a fraction

Dividing
The first step to dividing fractions is to find the reciprocal (reverse the numerator and denominator) of the second fraction. Next, multiply the two numerators. Then, multiply the two denominators. Finally, simplify the fractions if needed.