If power is a fraction with NOT numerator of 1 = combine previous rules

• If power is 0 = answer is always 1

ORDER OF OPERATIONS

- BEDMAS or PEMDAS (Please Excuse My Dear Aunt Sally) -
- Brackets or Parenthesis first start on innermost set of brackets
- Multiplication or division 2nd _
- Addition or subtraction last
- In Algebra, when you need to find the missing number, you "undo" the operations in reverse order

SHORTHAND NOTATION

Working with signs & brackets: $-(6) = -1 \times (+6)$ the "1" is implied but not shown

 $-2(-6) = -2 \times (-6)$ the "x" is implied but not shown

LAWS OF ARITHMETIC

- Commutative Law applies for 2 numbers 0
- Associative Law applies for 2 and the numbers
- "Commutare"; to exchange or reverse
 if you need to add or multiply, you can reverse the order and still get the same result
 does not apply to subtraction or vivision
 ociative Law applies for 2 particle numbers
 "Associare" reference
 if you nied road.
 - does not apply to subtraction or division
 - i.e. (4 + 5) +6 = 4 + (5 + 6)
- Distributive Law allows you to expand through brackets
 - Applies to multiplication over addition ONLY
 - "Distribuere" to distribute, give out, allot
 - To apply an operation to every unit within a bracket
 - The product of the sum of two numbers is equal to the sum of the individual products
 - i.e. 2 (3+4) = 2 x 3 + 2 x 4
- Identity & Inverse Elements
 - Identity Element a number that operates on another number without changing its value
 - Addition = 0i.e. 5 + 0 = 5
 - Multiplication = 1 i.e. 5 x 1 = 5
 - Inverse element an expression or number that operates on the original number to yield the identity element
 - Addition = the negative of that number i.e. 4 + (-4) = 0
 - Multiplication = the number which, when multiplied by a given number, will yield the number 1. The reciprocal of the original. i.e. 4 x ¼ = 1