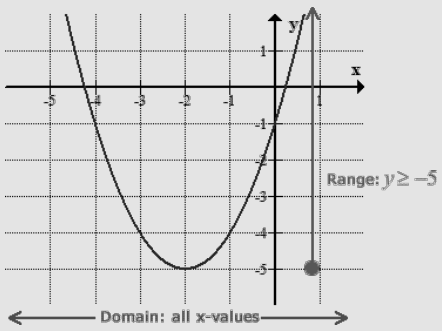
Domain and Range



Solving domain and range

$y=x^2+x-2/x^2-x-2$
domain-->[function]range-->

Family function (transformation)

y=a0 f(ax-h)-k
y=c is a horizontal line
y=x the pints on the graph have points (a,a)
$y=x^2$ graph is shaped like a U
$y=x^3$ graph is symmetrical about the origin
y=1/x graph has to branches
y=|x| graphed like a V
y=[[x]] is greater than the integer less than or equal to x

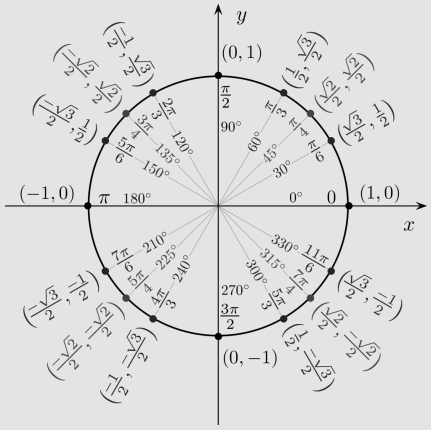
Trigonometry

Sin=opposite/hypotenuse
cos=adjacent/hypotenuse
tan=opposite/adjacent
Tan=Sin/Cos Sec=1/cos Csc=1/sin Cot=1/Tan or Cos/Sin

Log expanding and simplifying

$\text{Logb}(m^n)=n*\text{Logb}(m)$
1.) Multiply the inside log and turn into addition outside the log and vice verse
2.)divide inside the log and turn into subtraction outside the log, vice versa
3.)exponent on everything inside a log can be moves out in front as a multiplication, vice versa.
The Relationship: "logb(x) = y" means the same thing as "b y = x"
Logarithms are really exponents (powers); they're just written differently
logb(b) = 1, for any base b, because b1 = b
logb(1) = 0, for any base b, because b0 = .
logb(a) is undefined if a is negative
logb(0) is undefined for any base .
logb(bn) = n, for any base b

Unit Circle



Angle Difference and Sum

sin (A+B)=sin A cos B+ cos A sin B
cos (A+B)= cos A cos B-sin A sin B
tan (A+B)= tan A + tan B/ 1-tan A tan B
sin (A-B)=sin A cos B- cos A sin B
cos (A-B)= cos A cos B+sin A sin B
tan (A-B)= tan A - tan B/ 1+tan A tan B