Trigonometry...

Important Trig Identities:

$\sin x =$

$\cos x =$

$\tan x =$

$\cot x =$

$\sec x =$

$\csc x =$

$\sin^2 x + \cos^2 x =$
$(the\ other\ two\ forms)$

$\sin^2(x) =$
$\cos^2(x) =$

$\sin(2x) =$
$\cos(2x) =$

$\sin x = \dfrac{1}{\csc x}$

$\cos x = \dfrac{1}{\sec x}$

$\tan x = \dfrac{1}{\cot x} = \dfrac{\sin x}{\cos x}$

$\cot x = \dfrac{1}{\tan x} = \dfrac{\cos x}{\sin x}$

$\sec x = \dfrac{1}{\cos x}$

$\csc x = \dfrac{1}{\sin x}$

$\sin^2 x + \cos^2 x = 1$
$1 + \tan^2 x = \sec^2 x$
$1 + \cot^2 x = \csc^2 x$

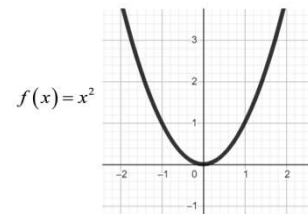$\sin^2(x) = \dfrac{1 - \cos(2x)}{2}$

$\cos^2(x) = \dfrac{1 + \cos(2x)}{2}$
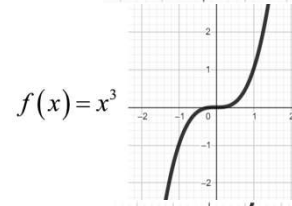
$\sin(2x) = 2\sin(x)\cos(x)$
$\cos(2x) = \cos^2(x) - \sin^2(x)$
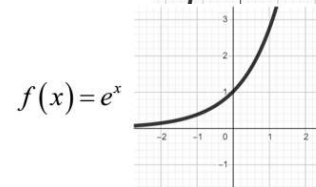
Curve shapes (sketch)...

$f(x) = x^2$

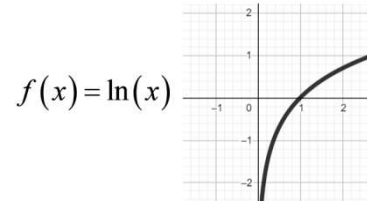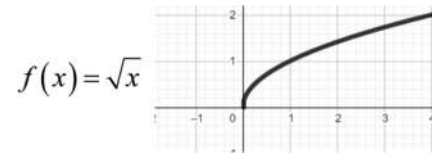$$f(x) = x^2$$

$f(x) = x^3$

$$f(x) = x^3$$

$f(x) = e^x$

$$f(x) = e^x$$

$f(x) = \ln(x)$
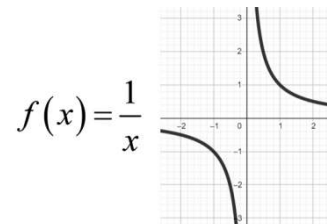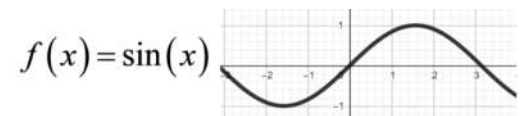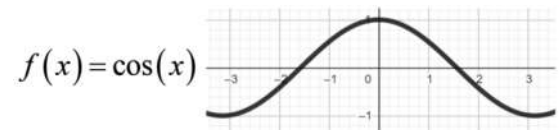
$$f(x) = \ln(x)$$

$f(x) = \sqrt{x}$

$$f(x) = \sqrt{x}$$

$f(x) = \dfrac{1}{x}$

$$f(x) = \dfrac{1}{x}$$
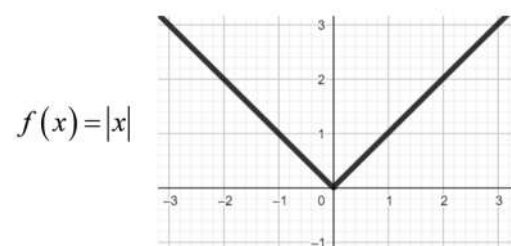
$f(x) = \sin(x)$

$$f(x) = \sin(x)$$

$f(x) = \cos(x)$

$$f(x) = \cos(x)$$

$f(x) = |x|$

$$f(x) = |x|$$

Geometry Formulas:

Circles :
area, A =
circumference, C =

Triangles :
$A = \qquad \left(b \perp h\right)$

Right − circular cylinders...
Surface Area = top / bottom + lateral
Surface Area =
Volume, V =

Geometry Formulas:

Circles :
area, $A = \pi r^2$
circumference, $C = 2\pi r$

Triangles :
$A = \dfrac{1}{2} bh \qquad \left(b \perp h\right)$

Right − circular cylinders...
Surface Area = top / bottom + lateral
Surface Area $= 2\left(\pi r^2\right) + 2\pi rh$
Volume, $V = \pi r^2 h$