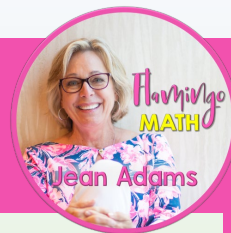


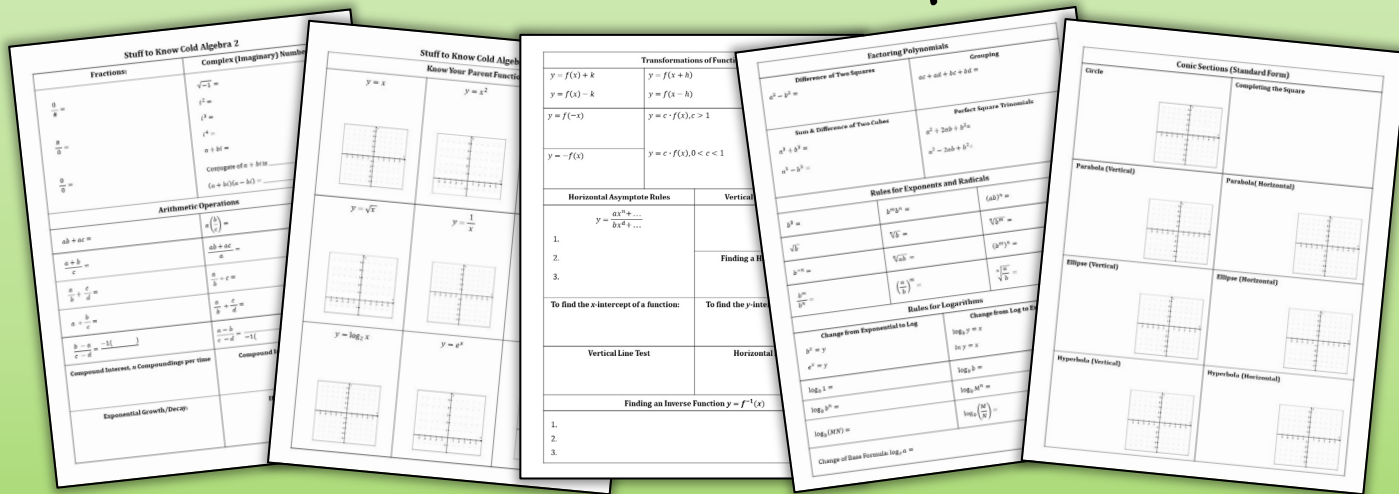
FREE!

Algebra 2



Stuff You Must Know Cold

Definitions, Theorems, Properties & more!



A HANDY REFERENCE SHEET FOR FINAL EXAM

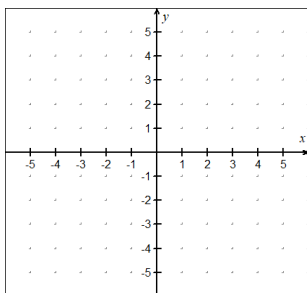
Stuff to Know Cold Algebra 2

Fractions:	Complex (Imaginary) Numbers:
$\frac{0}{\#} =$ $\frac{\#}{0} =$ $\frac{0}{0} =$	$\sqrt{-1} =$ $i^2 =$ $i^3 =$ $i^4 =$ $a + bi =$ Conjugate of $a + bi$ is _____ $(a + bi)(a - bi) =$ _____
Arithmetic Operations	
$ab + ac =$	$a\left(\frac{b}{c}\right) =$
$\frac{a + b}{c} =$	$\frac{ab + ac}{a} =$
$\frac{a}{b} + \frac{c}{d} =$	$\frac{a}{b} \div c =$
$a \div \frac{b}{c} =$	$\frac{a}{b} \div \frac{c}{d} =$
$\frac{b - a}{c - d} = \frac{-1(\quad)}{\quad}$	$\frac{a - b}{c - d} = \frac{\quad}{-1(\quad)}$
Compound Interest, n Compoundings per time	Compound Interest, Continuously
Exponential Growth/Decay:	Half-Life Formula

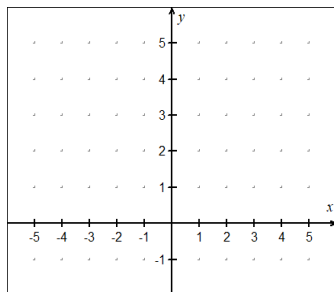
Stuff to Know Cold Algebra 2

Know Your Parent Functions

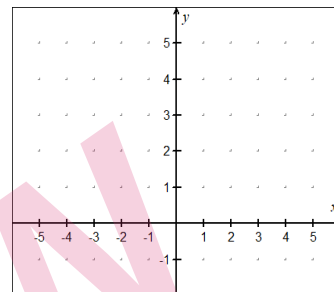
$$y = x$$



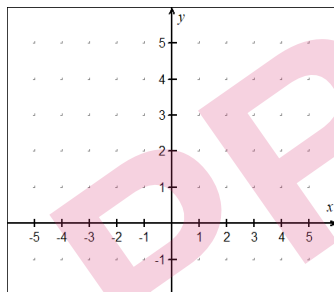
$$y = x^2$$



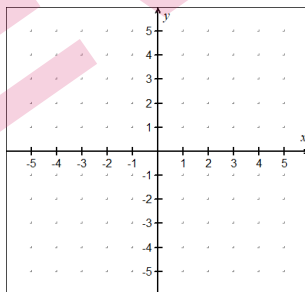
$$y = |x|$$



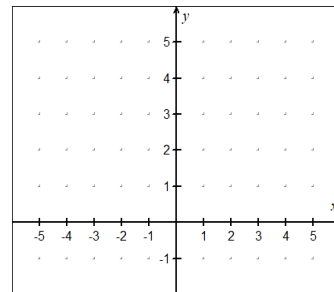
$$y = \sqrt{x}$$



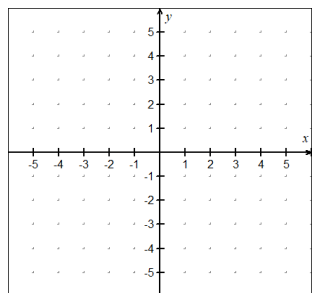
$$y = \frac{1}{x}$$



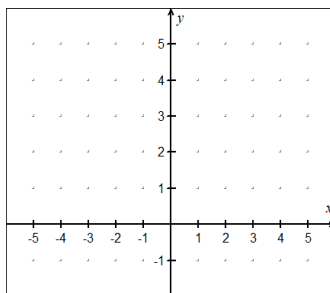
$$y = 2^x$$



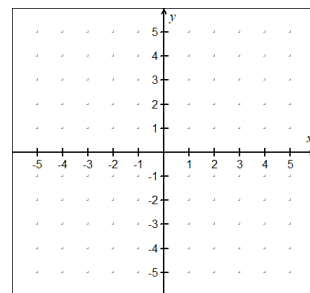
$$y = \log_2 x$$



$$y = e^x$$



$$y = \ln x$$



Transformations of Functions		
$y = f(x) + k$ $y = f(x) - k$	$y = f(x + h)$ $y = f(x - h)$	$y = f(x) $
$y = f(-x)$	$y = c \cdot f(x), c > 1$ $y = f(c \cdot x), c > 1$	
$y = -f(x)$	$y = c \cdot f(x), 0 < c < 1$ $y = f(c \cdot x), 0 < c < 1$	
Horizontal Asymptote Rules		Vertical Asymptote Rules
$y = \frac{ax^n + \dots}{bx^d + \dots}$		
		Finding a Hole in the Graph
To find the x-intercept of a function:		To find the y-intercept of a function:
Vertical Line Test		Horizontal Line Test
Finding an Inverse Function $y = f^{-1}(x)$		