Steps:

How to graph Log Functions:

CAN'T plug into a log.

$y - 2 = \log_5(x - 3)$

$y = \log_5(x - 3) + 2$

Change to exponential

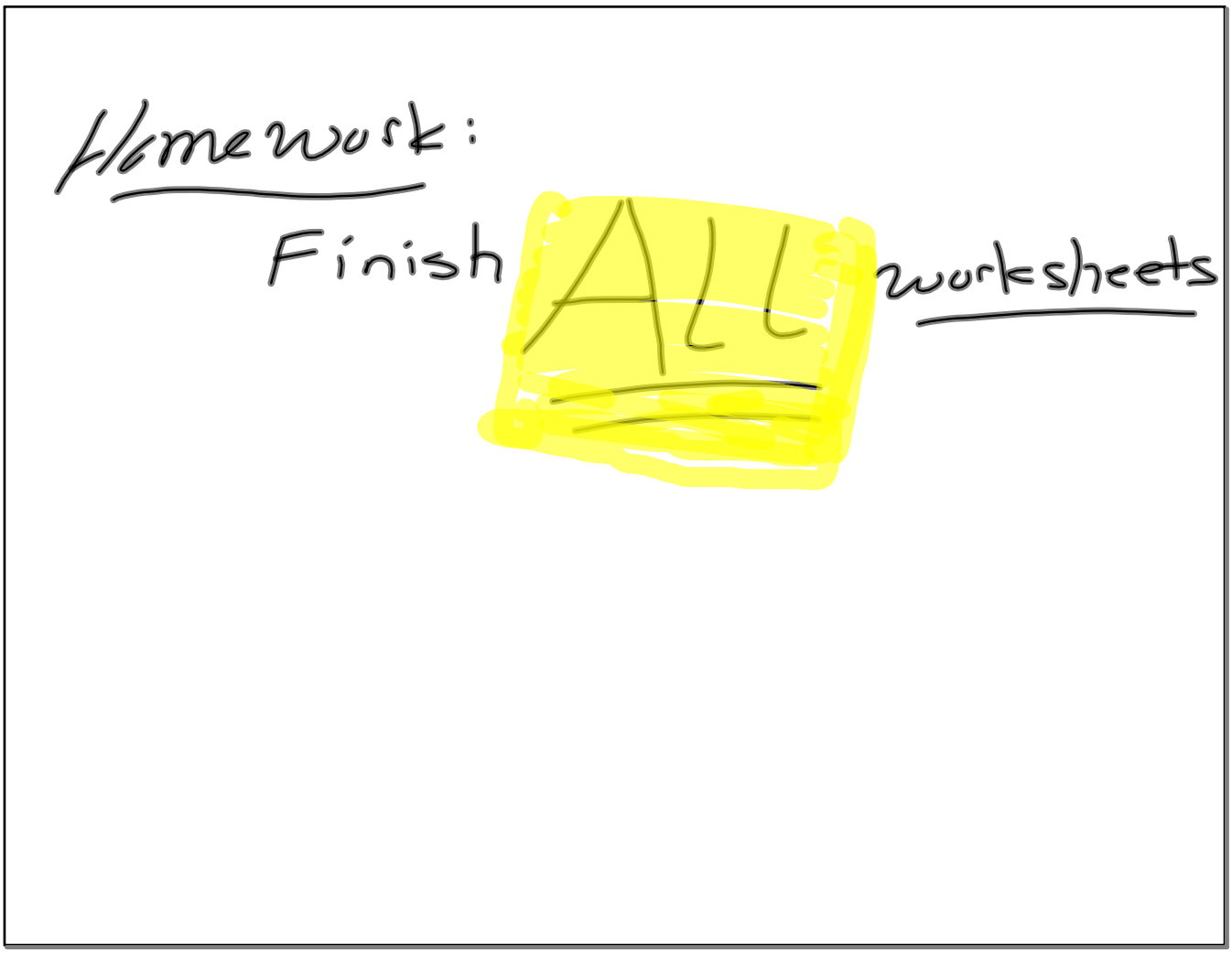
$5^{y-2} = x - 3$

$+3 \quad +3$

$5^{y-2} + 3 = x$

x	y
	exp = 0
	= 2

How to graph Exponetial Functions



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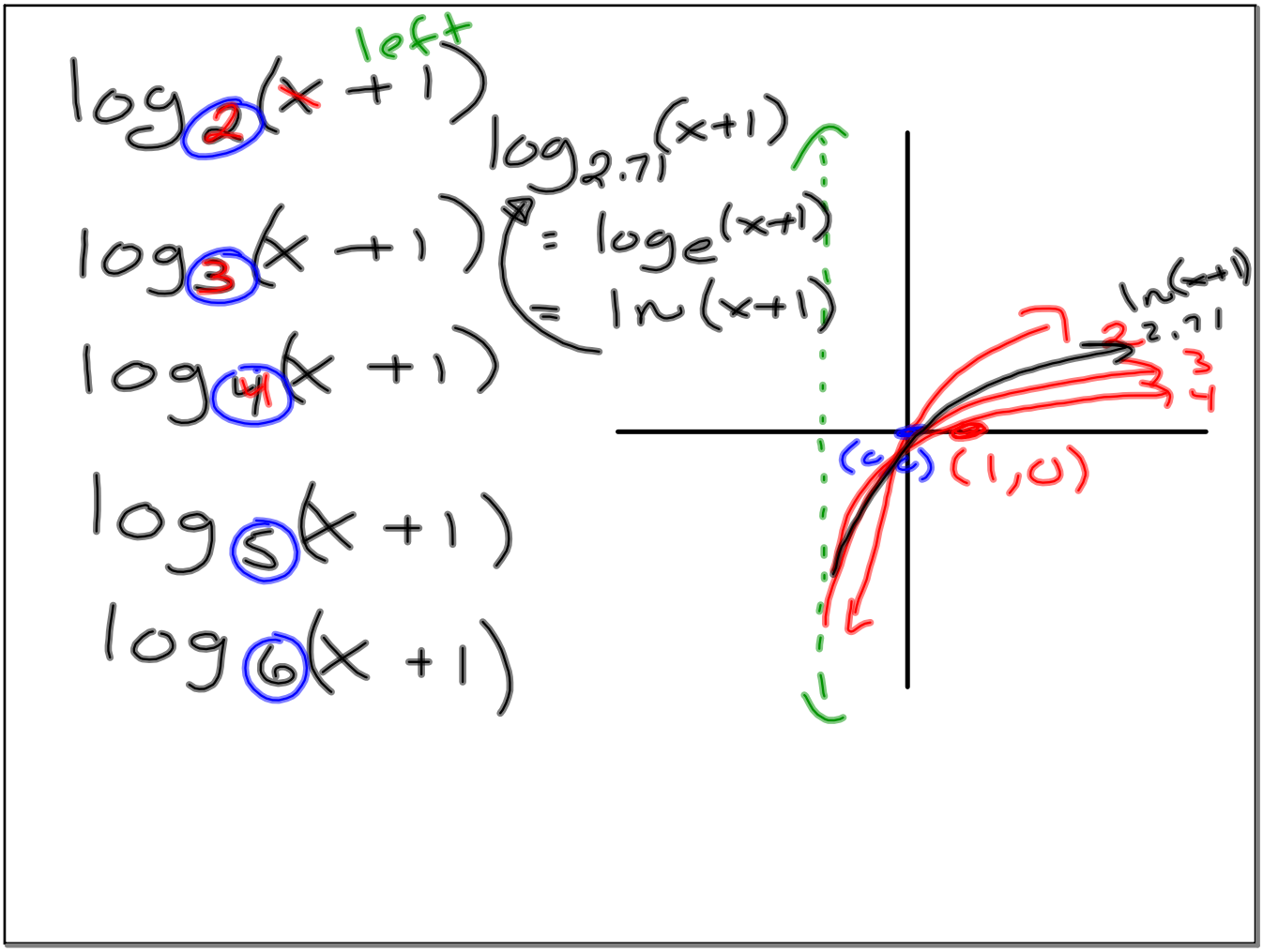
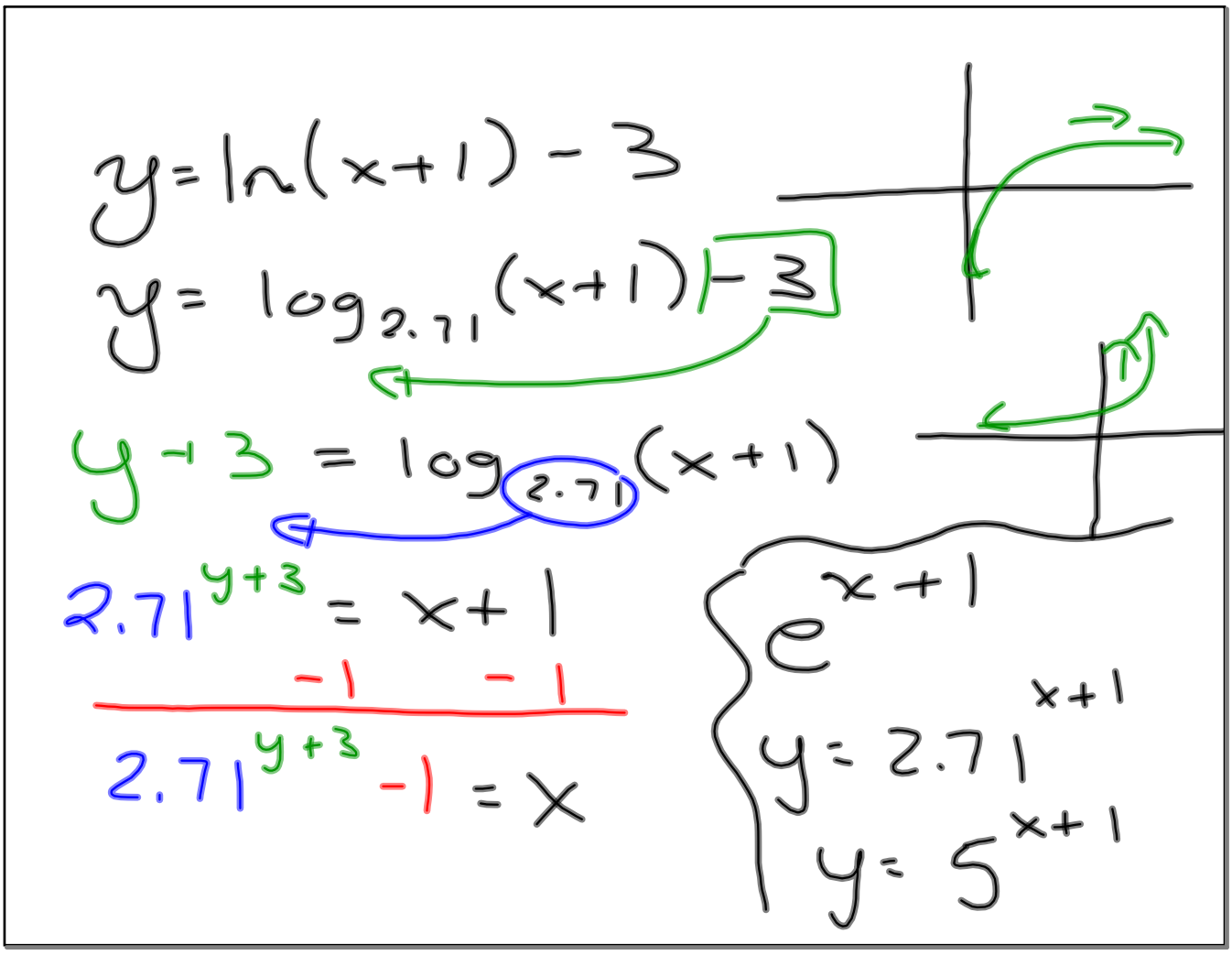
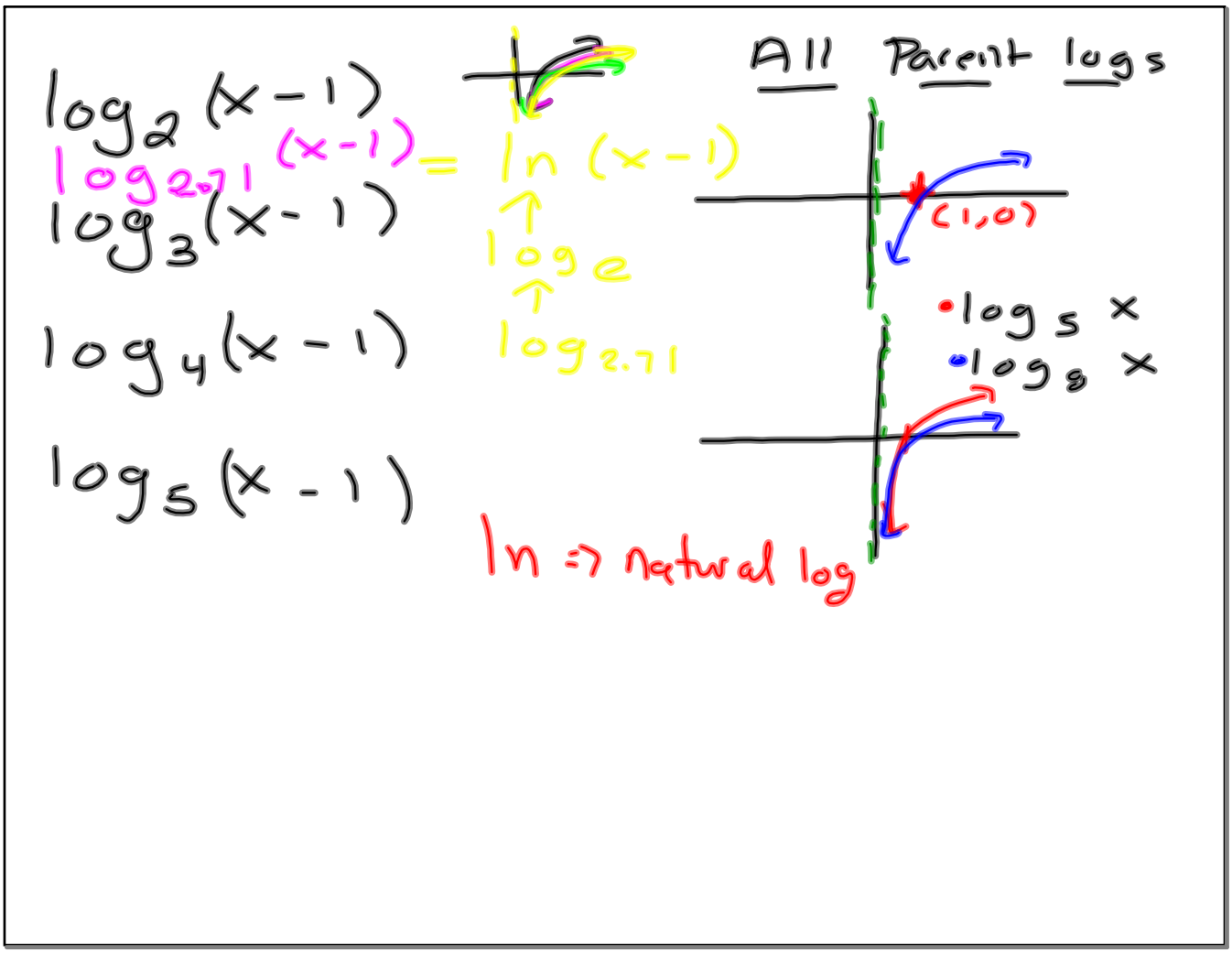
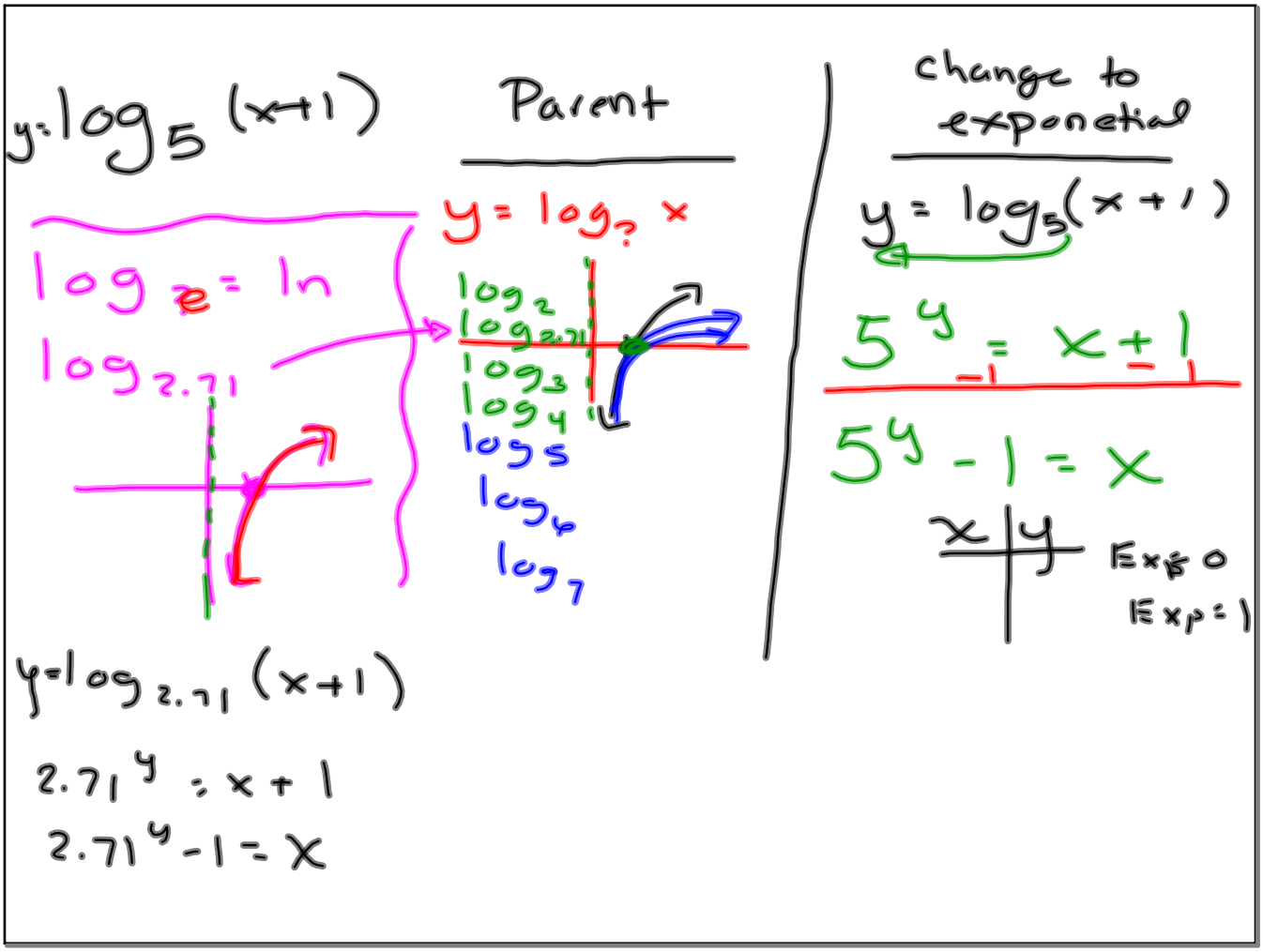
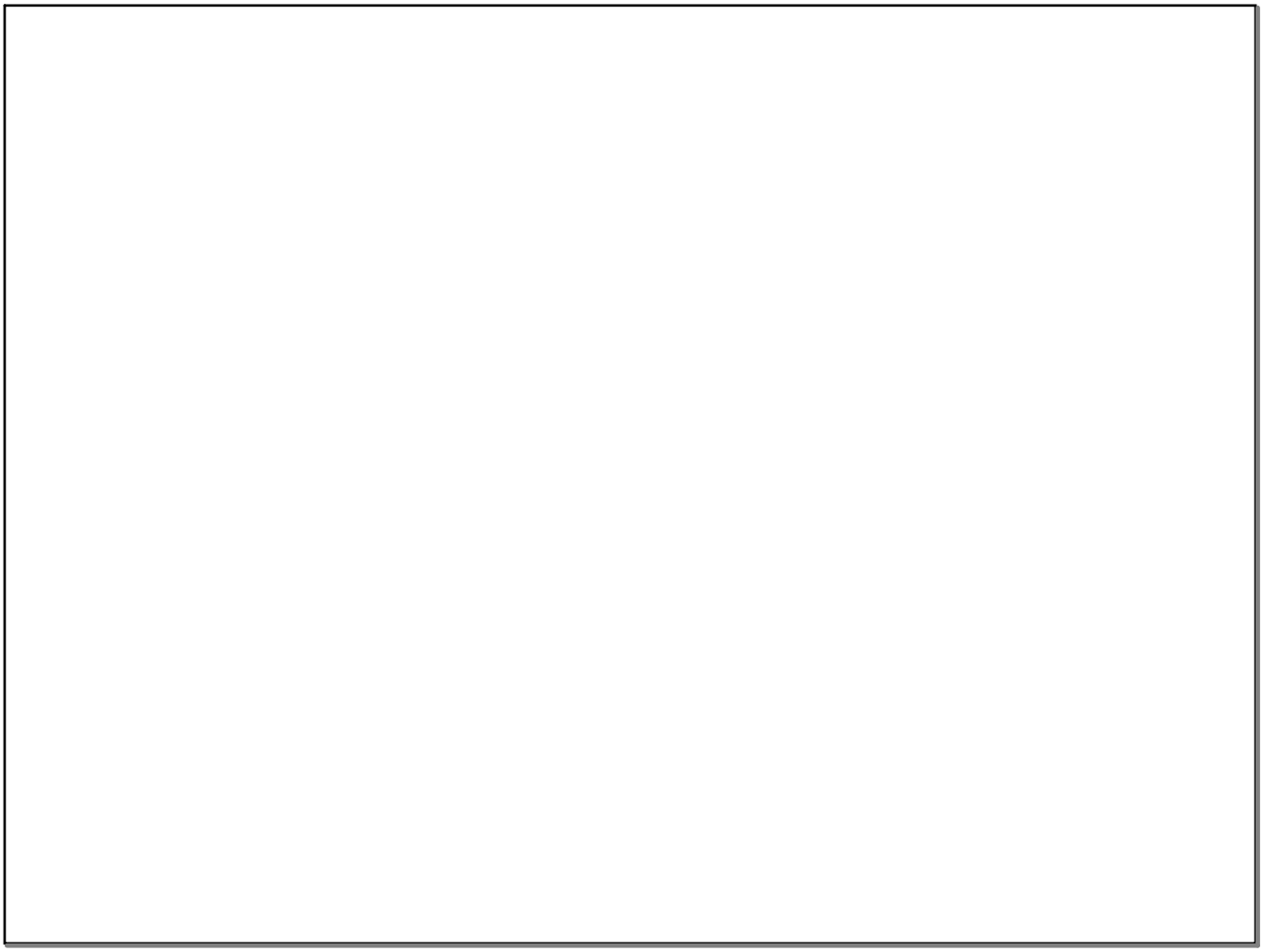

left
$\log_2(x+1)$
$\log_3(x+1)$
$\log_4(x+1)$
$\log_5(x+1)$
$\log_6(x+1)$
$\log_{2.71}(x+1)$
$= \log_e(x+1)$
$= \ln(x+1)$
$\ln(x+1)$
2.71
2
3
4
(0,1)
1

Feb 1-1:27 PM


y = ln(x+1) - 3
y = log 2.71 (x+1) - 3
y - 3 = log 2.71 (x+1)
2.71^(y+3) = x+1
-1 -1
2.71^(y+3) - 1 = x
e^(x+1)
y = 2.71^(x+1)
y = 5^(x+1)

Feb 1-1:33 PM


$\log_2(x-1)$
$\log_{2.71}(x-1) = \frac{\ln(x-1)}{\log e}$
$\log_3(x-1)$
$\log_4(x-1)$
$\log_5(x-1)$
$\log e \to \log_{2.71}$
ln => natural log
All Parent logs
(1,0)
• $\log_5 x$
• $\log_8 x$


y = log5 (x+1)
Parent
y = log2 x
log e = ln
log 2.71
y = log 2.71 (x+1)
2.71^y = x + 1
2.71^y - 1 = x
change to exponential
y = log5 (x+1)
5^y = x + 1
-1 -1
5^y - 1 = x
x | y
Exp 0
Exp 1