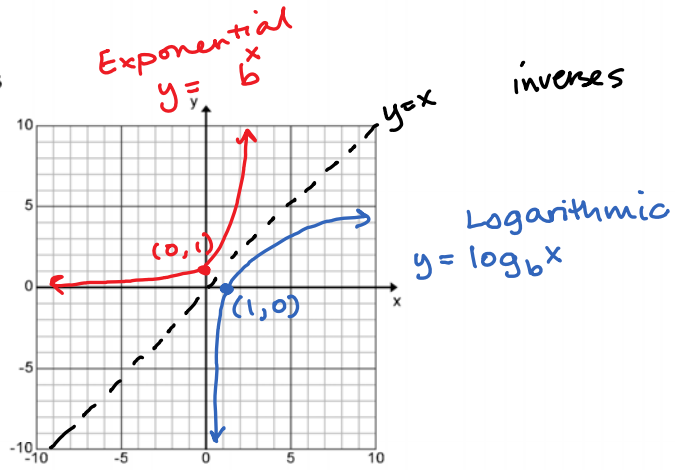


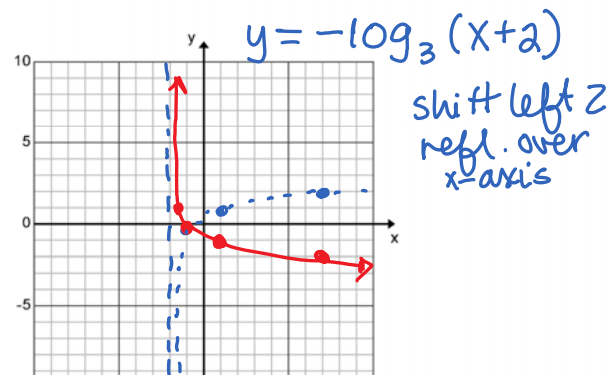
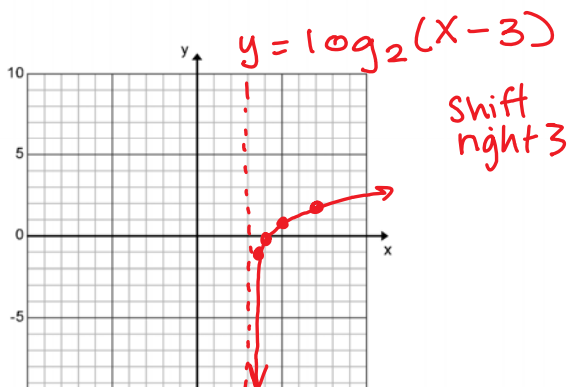
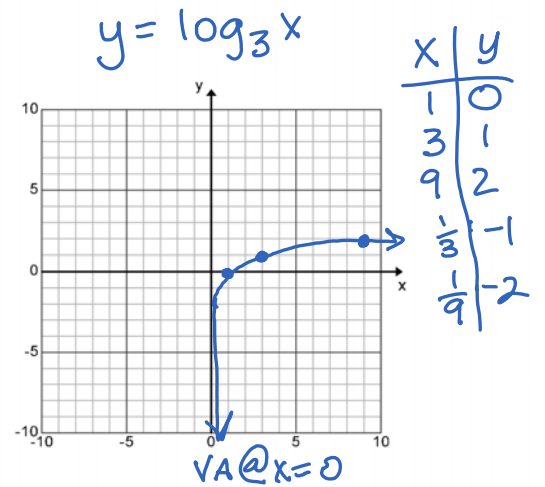
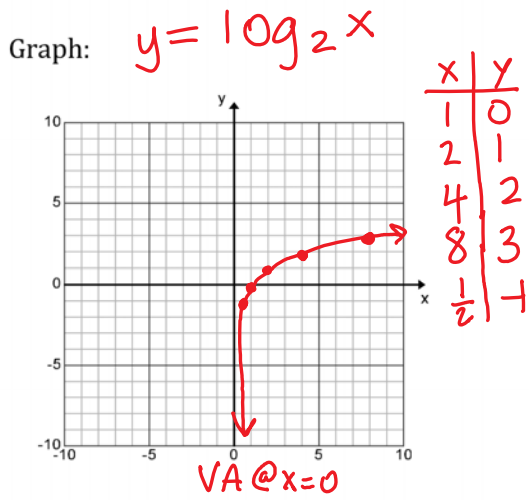
3.3 Day 2 Notes

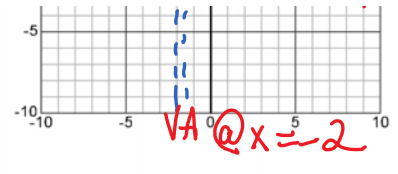
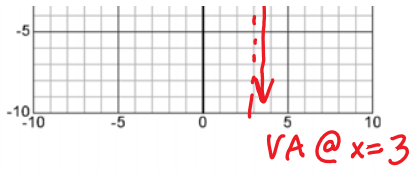
Friday, November 4, 2016 9:02 AM

Præcalculus
3.3 Notes – Logarithmic Functions



Exponential Form	Logarithmic Form
$y = b^x$ ← exponent ↑ base → argument	$\log_b y = x$ ← exponent ↑ base → argument





Common Logs Logs w/ Base = 10

$$\textcircled{1} \log 100 = 2 \quad \textcircled{2} \log .001 = \log \frac{1}{1000} = -3$$

$$\textcircled{3} \log 50 \approx 1.699$$

(calculator)

Natural Logs Logs w/ Base = $e \approx 2.718$ (irrational)

$$\textcircled{4} \ln 1 = 0$$

$$\textcircled{5} \ln e^2 = 2$$

$$\textcircled{6} \ln 10 \approx 2.303$$

(calculator)

Tricky Problems

$$\textcircled{7} 4^{\log_4 5} = 5$$

$$\textcircled{8} a^{\log_a x} = x$$

$$\textcircled{9} 10^{\log 6} = 6$$