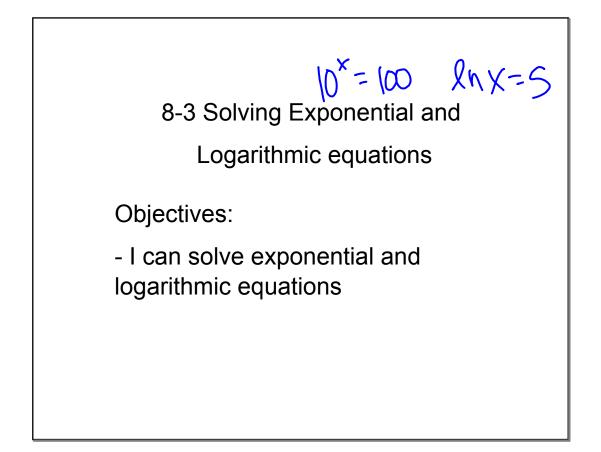
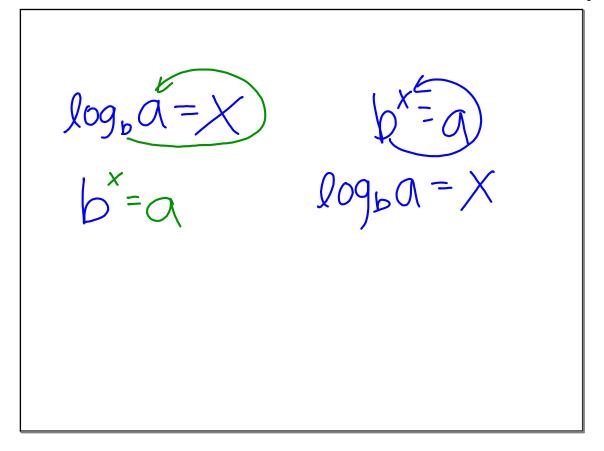
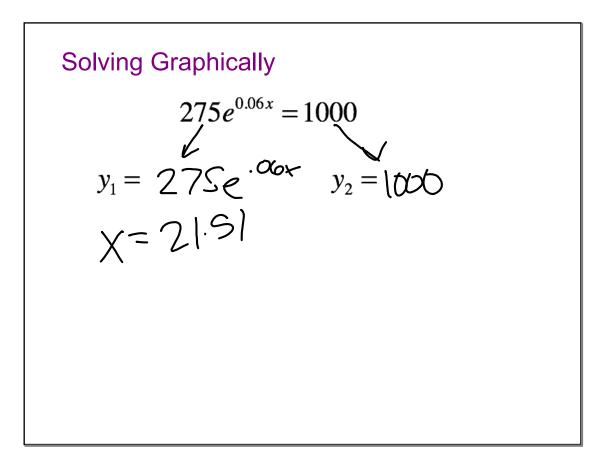
0| $log\left(\frac{\chi^{4}}{\sqrt[3]{(\chi-1)}}\right)$ $\log x^{4} - \log \sqrt[3]{x-1}$ $4\log x - \frac{1}{3}\log (x-1)$

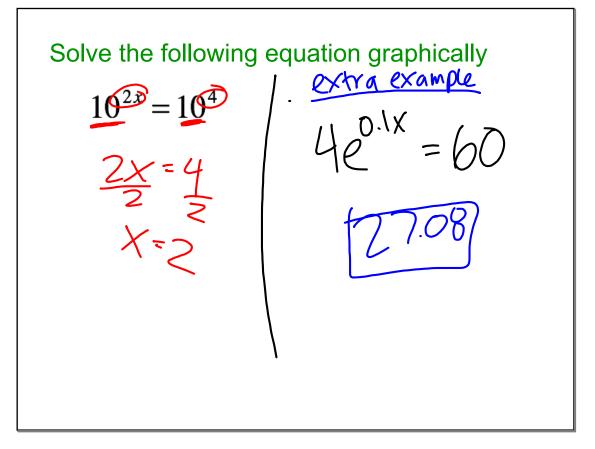
15. 18/00 1× + 9/00 3×-100/0 $log \sqrt{x}^{18} + log \sqrt{3} \sqrt{x}^{2} - log to$ $log \chi^{\frac{1}{2} \cdot 18} + log \chi^{\frac{3}{2} \cdot 19}$ logx " Jlogx 3- 209 10 log(x ?. x 3) 0 log 10 $log(X^{9},X^{3})$ $\frac{10}{log X^{12}}$

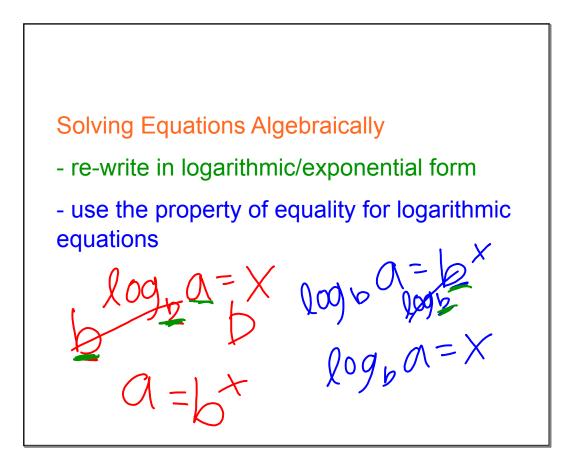
9. $\log_5(X^2 \cdot X^2 + 1)$ $\frac{\log_{s} \chi^{2} + \log_{s} (\chi^{2} + 1)}{\log_{s} \chi^{2} + \log_{s} (\chi^{2} + 1)^{2}}$ $\frac{\log_{s} \chi^{2} + \log_{s} (\chi^{2} + 1)^{2}}{2\log_{s} \chi + \frac{1}{2}\log_{s} (\chi^{2} + 1)}$

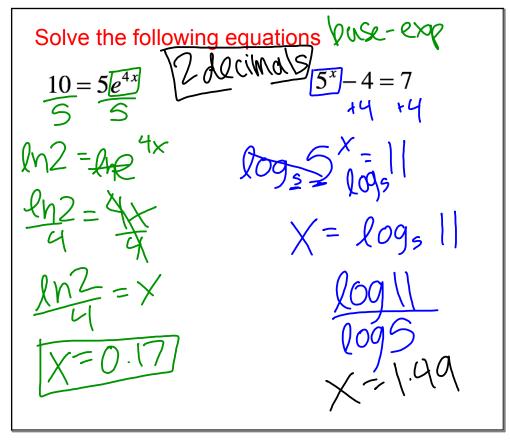


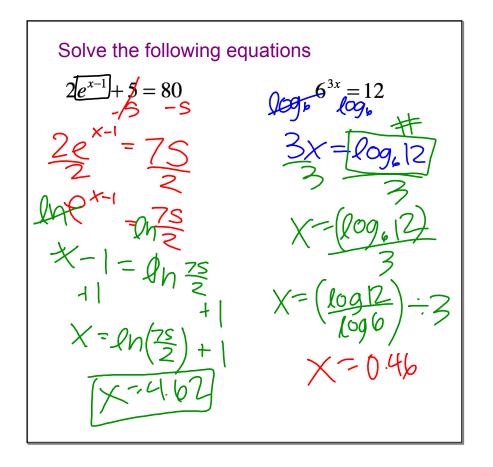




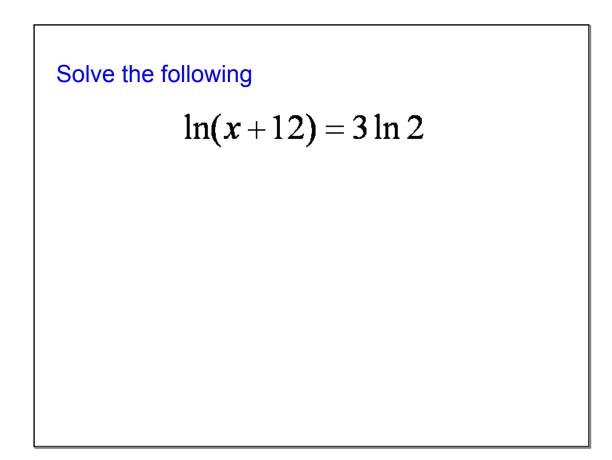


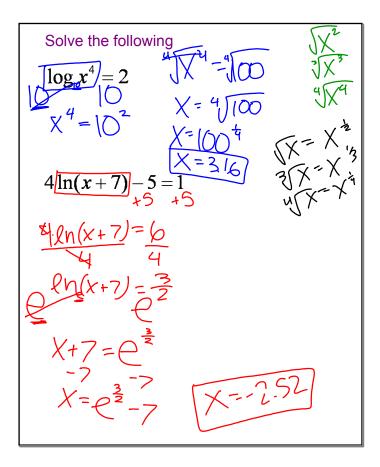


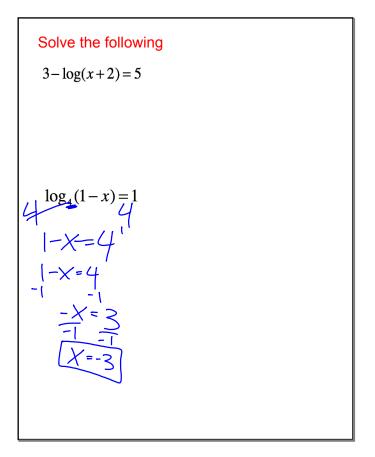




Suppose that \$250 is deposited into an account that pays 4,5% compounded quarterly. Solve for t to find how long it will take for 1.0112C9F the account to contain at least \$500. nt A(+)= 10125 09 1.01125 How long will it take to triple a \$250 initial investment in an account that pays 4.5% compounded quarterly?







Solve the following

$$\log(x-2) + \log(x+7) = 3\log 4$$

Comparing Earthquake intensities:

On the Richter scale, the magnitude M of an earthquake depends on the amount of energy, E (measured in ergs), released by the earthquake as follows:

$$M = \frac{2}{3} \log \frac{E}{10^{11.8}}$$

How many times more severe is a 7.4 quake than a 5.5 quake?