

$$\textcircled{13} \log_3 3x^2 - \log_3 3 = 4$$

$$\log_3 \frac{3x^2}{3} = 4$$

$$6^4 = x^2$$

solve

$$\textcircled{11} \ln(8-x^2) + \ln(7) = \ln(28)$$

$$\ln(56-7x^2) = \ln(28)$$

$$56-7x^2=28 \text{ solve}$$

$$\textcircled{6} -9e^{10 \ln 8} + 8 = -55.2$$

$$\frac{-9e^{10 \ln 8} - 47.2}{-9}$$

$$\ln(10 \ln 8) = \ln(14.22)$$

$$\frac{10 \ln 8 = \ln(14.22)}{-10} = \frac{-10 \ln 8}{-10}$$

-10 enter
-10 enter

$$\textcircled{3} \log_5(x-1) - \log_5(x-5) = \log_5(4)$$

$$\log_5\left(\frac{x-1}{x-5}\right) = \log_5(4)$$

$$\frac{x-1}{x-5} = 4$$

cross multiply;
solve

$$\textcircled{20} -8 + 16^{5x} + 8 = 23$$

$$-8 + 16^{5x} = 15$$

$$16^{5x} = 23$$

log
of
ln

$$\log_6(5+6) - \log_6(6) = \log_6\left(\frac{3}{2}\right)$$

+6
5

16 enter
=5 enter

$$\textcircled{15} \ln(7) + \ln(2x-8) = 3$$

$$\ln(-14x-56) = 3$$

USE
exponential
form

$$\log_2(-14x-56) = 3$$

$$e^3 = -14x - 56$$

$$\frac{e^3 + 56}{-14} = \frac{-14x}{-14}$$

May 4-8:18 AM