

Set 5



$$e^{2x} + e^x - 6 = 0$$

$x = ?$ (Round to the nearest hundredth)

Set 6



$$y = \frac{3x^2 + 7x - 6}{x^2 + 2x - 3}$$

The horizontal asymptote is $y = ?$

Set 5



$$\ln \sqrt[3]{2x + 1} = 1$$

$x = ?$ (Round to the nearest hundredth)

Set 6



$$y = \frac{3x^2 + 7x - 6}{x^2 + 2x - 3}$$

The y intercept is $y = ?$

Set 5



$$2^x = 3^{2x+1}$$

$x = ?$ (Round to the nearest hundredth)

Set 6



$$y = \frac{3x^2 + 7x - 6}{x^2 + 2x - 3}$$

The hole is at $x = ?$

Set 5



$$6^{2x-3} = 11$$

$x = ?$ (Round to the nearest hundredth)

Set 6



$$y = \frac{3x^2 + 7x - 6}{x^2 + 2x - 3}$$

The vertical asymptote is at $x = ?$

Set 3



Evaluate: $2^{\log_2 4-3}$

Set 4



The population of cats in Waxhaw increased exponentially from 2 thousand to 3 thousand in 3 months. Find the growth rate to the nearest ten thousandth.

Set 3



Evaluate: $\log_2 80 - \log_2 5$

Set 4



Ms. Hunt invested \$10,000 in an account earning interest continuously at 4%. How long will it take her to double her investment? Round to the nearest tenth.

Set 3



Evaluate: $\log_4 9 \cdot \log_5 16 \cdot \log_3 25$

Set 4



If a prescription medicine in the blood stream has a half-life of 4 hours, how many hours will it take for 20% to remain? Round to the nearest hundredth.

Set 3



Evaluate: $2 \ln \frac{1}{e^3}$

Set 4



A population of wolves increased from 70 to 140 in 3 years. What was the yearly growth rate? Round to the nearest hundredth.

Set 1



$$\log_{\frac{1}{3}}(x^2 + x) - \log_{\frac{1}{3}}(x^2 - 1) = -1$$

$x = ?$

Set 2



$$3\sqrt{27} = 9^{2x}$$

$x = ?$

Set 1



$$\log_2 8^x = -3$$

$x = ?$

Set 2



$$2^{6+x} = 4^{x+2}$$

$x = ?$

Set 1



$$\begin{aligned} \log_3(x - 1) - \log_3(x + 6) &= \\ \log_3(x - 2) - \log_3(x + 3) &= \\ x &= ? \end{aligned}$$

Set 2



$$\begin{aligned} 4^{2x} + 6 \cdot 4^x - 16 &= 0 \\ x &= ? \end{aligned}$$

Set 1



$$\begin{aligned} \log_a(x) + \log_a(x - 2) &= \log_a(x + 4) \\ x &= ? \end{aligned}$$

Set 2



$$\begin{aligned} \sqrt{16^x} &= 8^{x-1} \\ x &= ? \end{aligned}$$

Set 1 Sum = 9



$3/2$



-1



$9/2$



4

Set 2 Sum = $6 \frac{1}{8}$



$5/8$



2



$\frac{1}{2}$



3

Set 3 Sum = $6 \frac{1}{2}$



$\frac{1}{2}$



4



8



-6

Set 4 Sum = 26.9552



.1352



17.3



9.29



.23

Set 5 Sum = 11.67



.69



9.54



-.73



2.17

Set 6 Sum = 3



3



2



-3



1