

Use a calculator to estimate $\log 15$.

1.1761

1.5

0.6667

2.708

Use a calculator to estimate $\ln 3$

0.4771

20.0855

1.0986

1000

Use a calculator to estimate $e^{2.3}$.

0.8329

9.9742

199.5262

0.3617

Estimate the solution to the exponential equation using logarithms.

$$7^x = 16$$

1.1293

0.8451

1.2041

1.4248

Use logarithms to estimate the solution to the exponential inequality.

$$7^{p+2} \leq 13^{5-p}$$

- p ≥ -14.4303
- p ≤ 0.2688
- p ≤ 1.9803
- p ≤ 7.6001

Use a calculator to estimate $\log_4 30$.

- 1.4771
- 3.4012
- 0.6021
- 2.4534

Which of the following is equal to $\frac{\ln 15}{\ln a}$? Assume a $\neq 1$

- $\log 15 - \log a$
- $\log_a 15$
- $\log_{15} a$
- $\ln 15 - \ln a$

Write the logarithmic equation in exponential form.

$$\ln 16 \approx 2.7726$$



$$e^{16} \approx 2.7726$$



$$10^{2.7726} \approx 16$$



$$e^{2.7726} \approx 16$$



$$10^{16} \approx 2.7726$$

Solve the equation. Round to the nearest ten-thousandth.

$$3e^x - 1 = 0$$



$$x = 1.0986$$



$$x = -1.0986$$



$$x = -0.9102$$



$$x = 0.9102$$

Solve the inequality. Round to the nearest ten-thousandth.

$$e^{4x} \geq 16$$



$$x \geq 0.6931$$



$$x \geq 2$$



$$x \geq 4$$



$$x \geq -1.2274$$