Notes 6.8 - Natural Logarithms

Exponential and Logarithmic functions are inverses.

Vocabulary

Natural Base, *e* - irrational number like π and has a value of 2.71828...

Natural Logarithm (*ln*) - inverse of e^x so $\log_e x$ or $\ln x$

NOTE: Since *e* and *ln* are inverses, they "cancel" each other out.

Write each exponential equation in logarithmic form.

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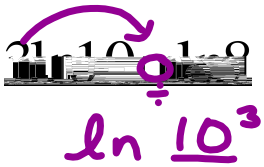
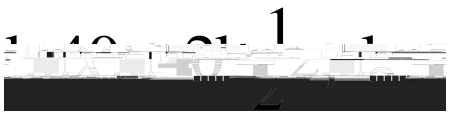
$e^{2.1438} = x$

$e^{x} = 18$

Write each expression as a single logarithm.



$\ln 10^3$



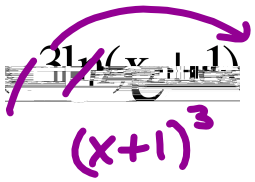
Write each expression as a single logarithm.

$$\ln \frac{8^6}{4^2} = \ln 63$$

Simplify.

* only cancel w

Simplify.

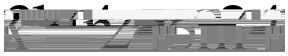


$(x+1)^3$

$2x+x=$

Solve.

Solve.



Continuously Compounded Interest