LESSON
5-5

SECONDARY MATH 3

CORE STANDARDS
F.LE.4
F.BF.5

OBJECTIVE

1. I can solve find the inverse for Logarithmic and Exponential functions.

NOTES

Recall: $\log_b x = y$ is true only if $b^y = x$

Finding the inverse of Logarithms or Exponentials:

1. Change f(x) to x and x to y
2. Isolate the log or the exponential term.
3. Perform the inverse operation.
4. Simplify and solve for y
5. Change y into $f^{-1}(x)$

EXAMPLES

Find the inverse of each function.

1. $f(x) = \ln(x + 2) - 3$

2. $f(x) = \log_3(2x + 1) + 5$

3. $f(x) = 5^{x-6} + 1$

4. $f(x) = 5 \cdot 2^{3-x} - 4$