LESSON
5-3

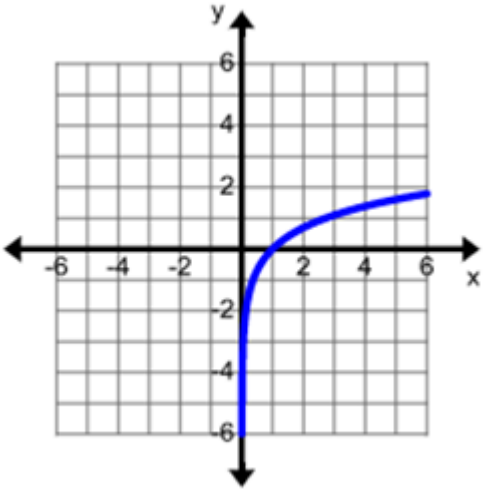
SECONDARY MATH 3

CORE STANDARDS
F.IF.7d

OBJECTIVE

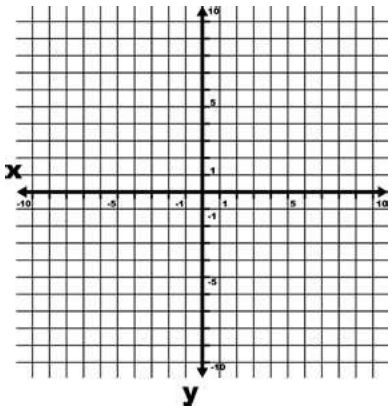
1. I can graph logarithmic functions.

NOTES When graphing a logarithmic functions we need to remember about the vertical asymptote (at x=0). Important points include: (1,0) and $(b, 1)$ where b is the base of the logarithm.
From those points we need to make the appropriate transformations.

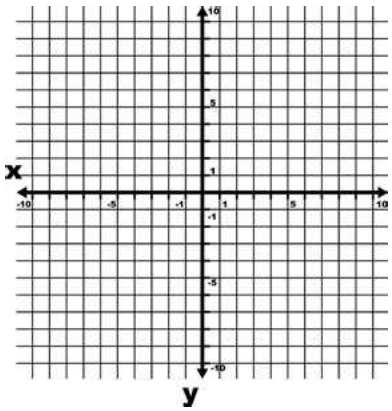


EXAMPLES Graph the following.

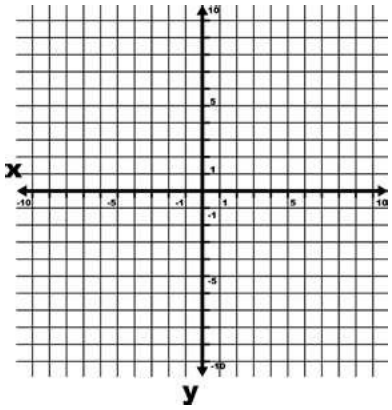
1. $f(x) = \log_3 x$



2. $f(x) = \log_3(x - 4)$



3. $f(x) = 2\log_5 x - 3$



4. $f(x) = \log(x + 3) - 5$