

W1 – 6.3 Transformations of Exponential and Logarithmic Functions

MHF4U

Jensen

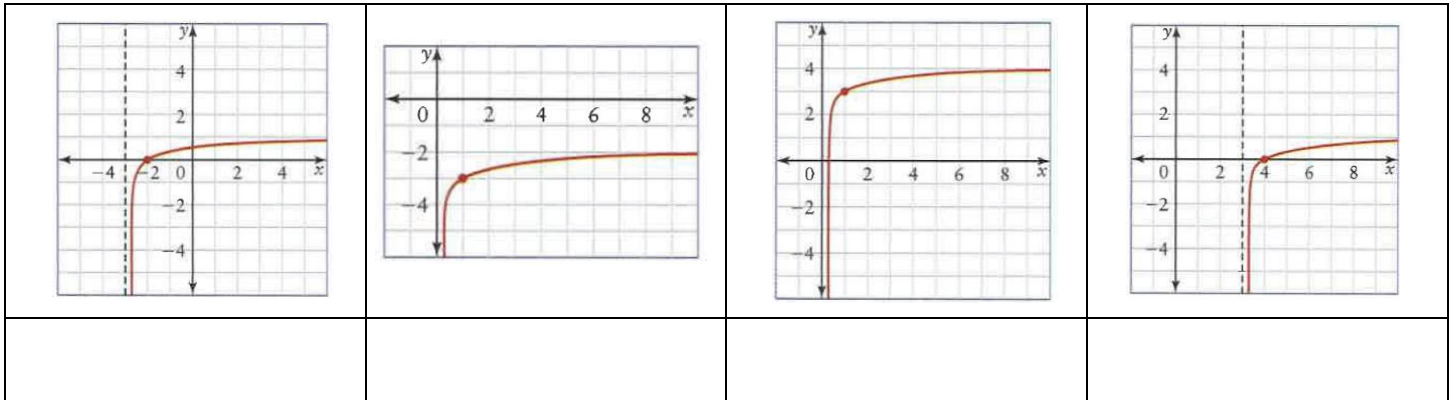
1) Write the letter of the equation under the corresponding graph

A) $y = \log(x - 3)$

B) $y = \log x - 3$

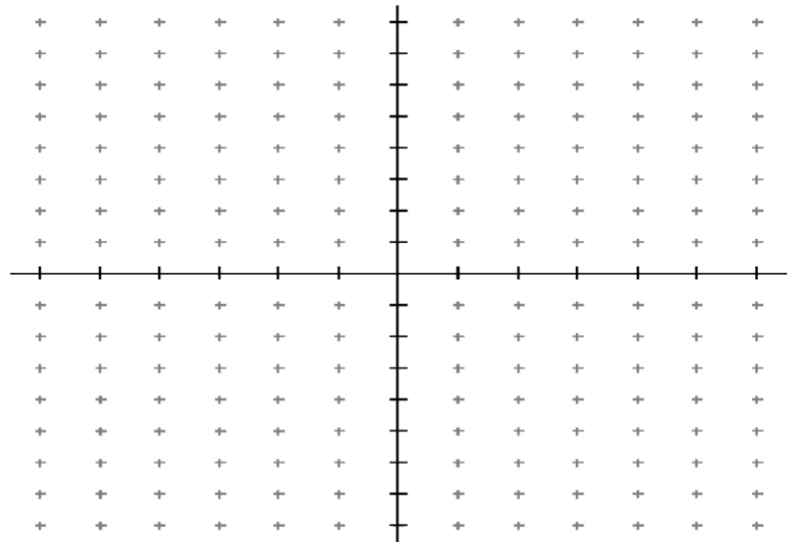
C) $y = \log(x + 3)$

D) $y = \log x + 3$

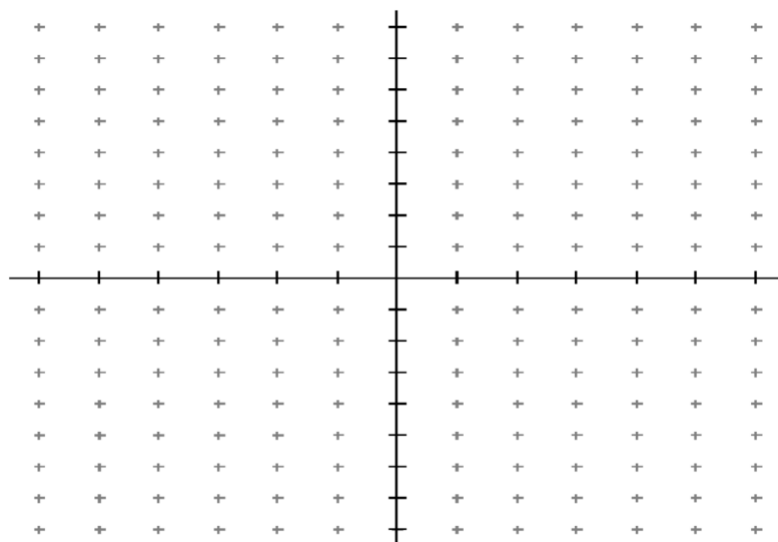


2) Sketch a graph of each of the following logarithmic functions by applying transformations to the parent function. Make sure to identify key points such as asymptotes and x -intercepts.

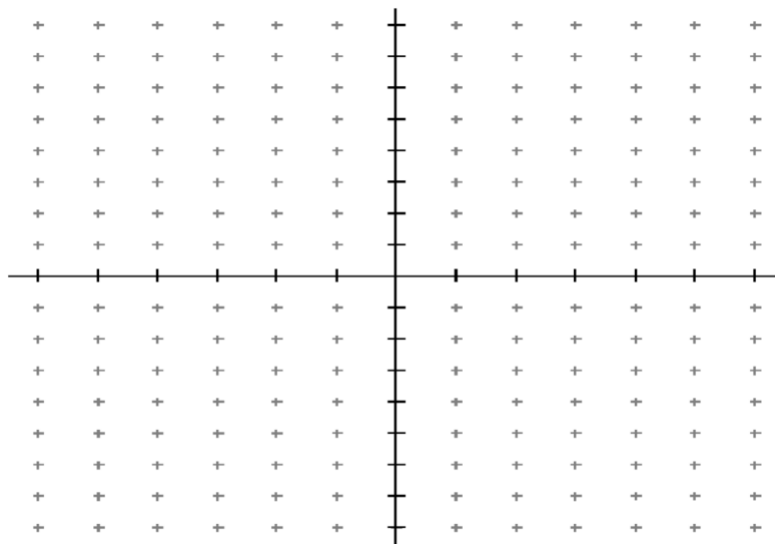
a) $f(x) = -2 \log_2 x - 1$



b) $g(x) = \log_4(x - 1) + 4$

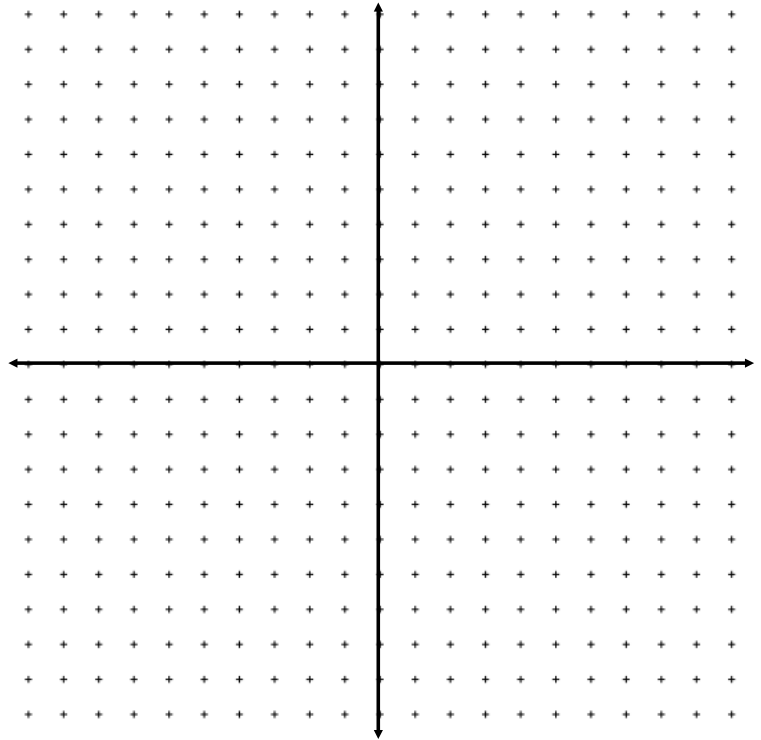


c) $h(x) = 4 \log_3 \left[\frac{1}{2}(x + 2) \right] - 3$

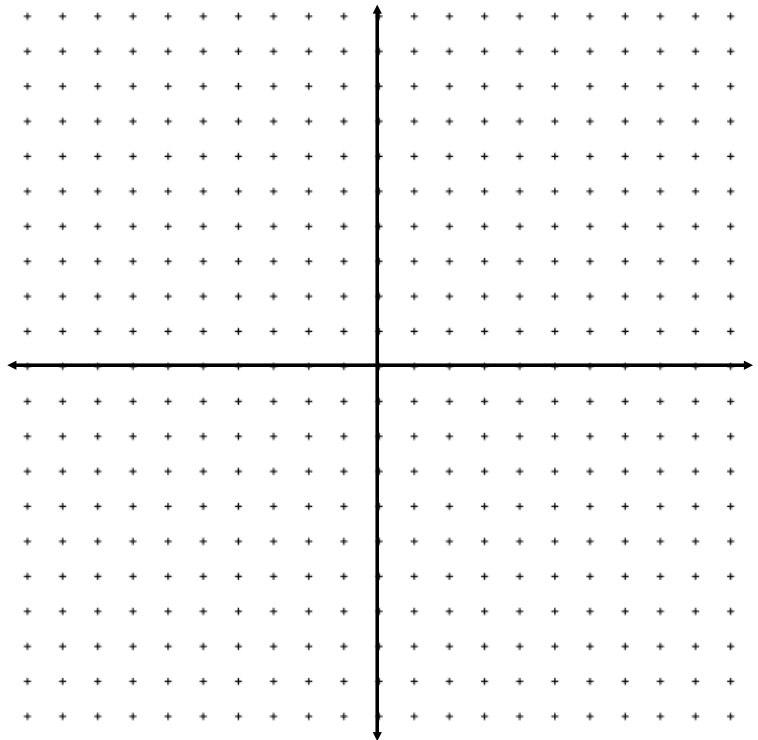


3) Sketch a graph of each of the following exponential functions by applying transformations to the parent function. Make sure to identify key points such as asymptotes and y -intercepts.

a) $f(x) = -3(2)^x + 1$



b) $g(x) = 3^{x-3} - 4$



c) $h(x) = 2(4)^{\frac{1}{2}(x+1)} - 3$

