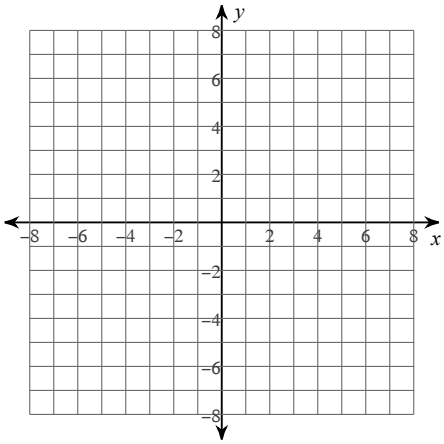
PreAP Algebra 2 Name_____

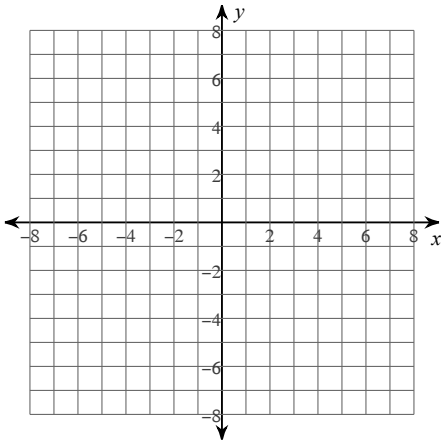
Graphing Logarithms

Identify the domain, range, and asymptote of each. Then sketch the graph. Use your key points (1, 0) and (base, 1). Draw and label the asymptotes.

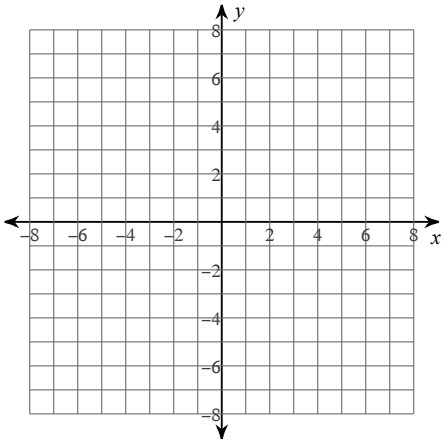
1) $y = \log_5 (x - 3) + 3$



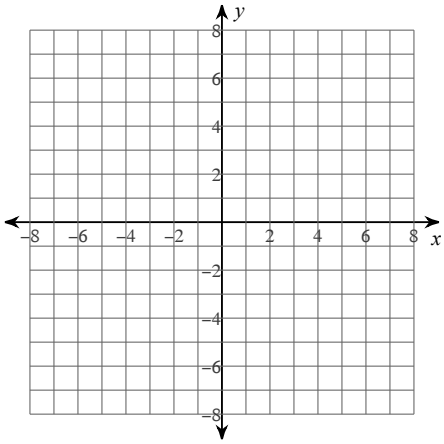
2) $y = \log_6 (x - 1) + 2$



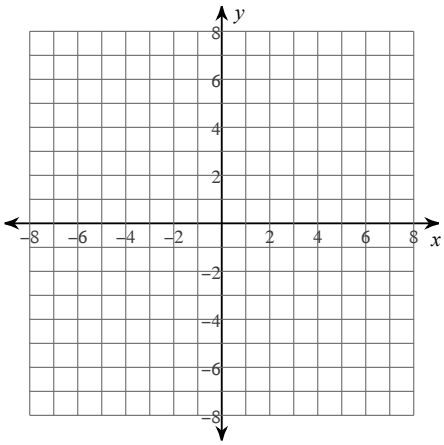
3) $y = \log_2 (x + 4)$



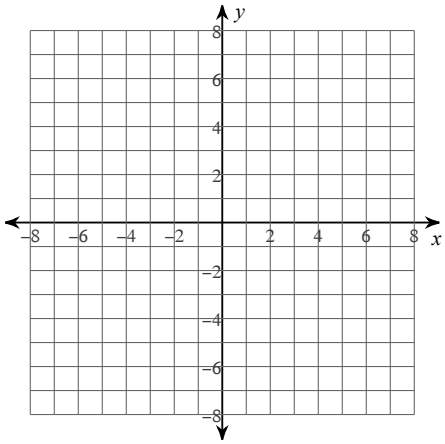
4) $y = \log (x - 2) - 3$



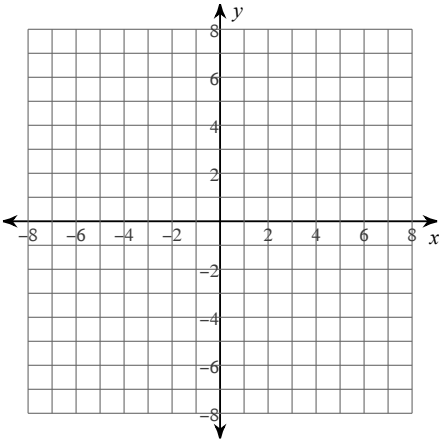
5) $y = \log_3 (x + 4) + 1$



6) $y = 3 \log_3(x - 2) - 2$

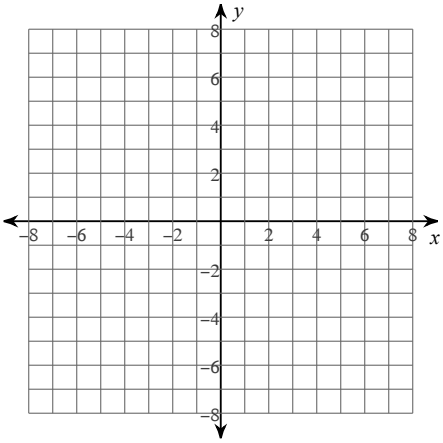


7) $y = -2\log_4(x - 3)$

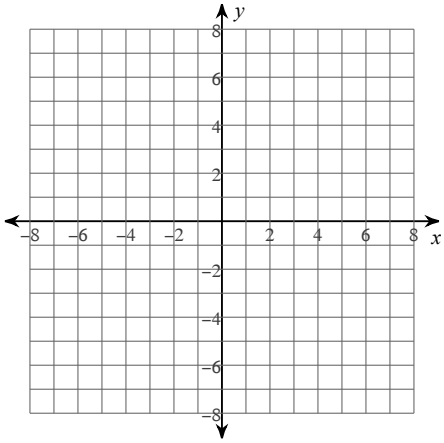


Identify the domain and range of each. Then sketch the graph. Use your key points to graph.

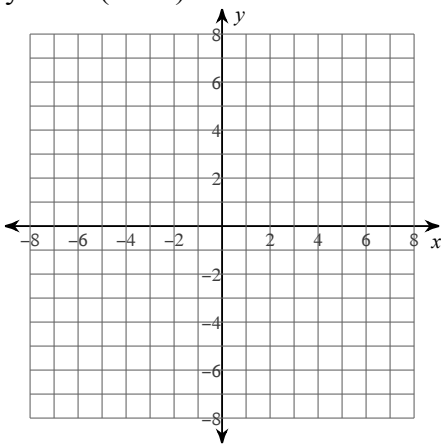
8) $y = \ln(x - 1) - 5$



9) $y = \ln(x + 5) + 2$



10) $y = -\ln(x + 1) - 2$



11) $y = \frac{1}{2}\ln(x) - 2$ you need to number this graph so that it fits nicely!