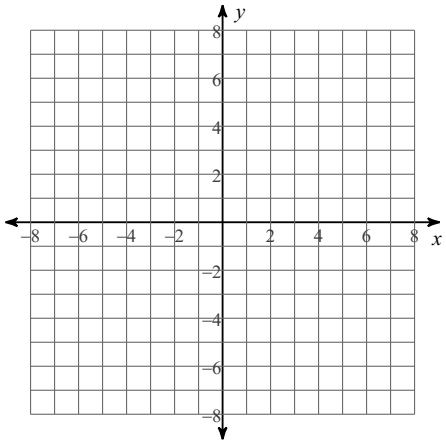
Precalc Name_____

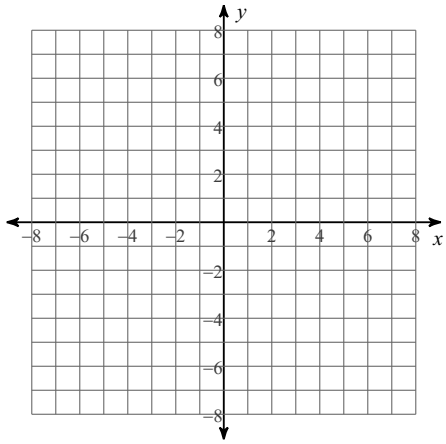
Graphing logarithmic functions practice (M3 2.3)

Sketch the graph of this function. Then state the equation of the asymptote, the domain, and the range.

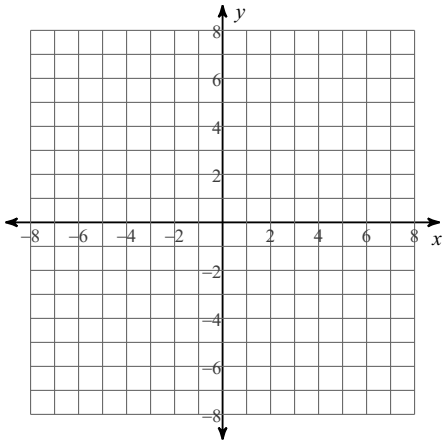
1) $f(x) = \log_3(x-2) - 1$



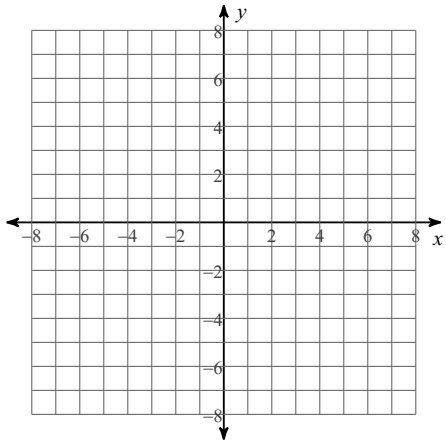
2) $f(x) = \log_4(x+4) - 2$



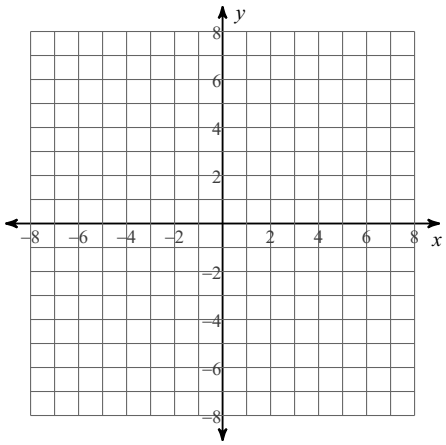
3) $f(x) = \log_6(x-3) - 5$



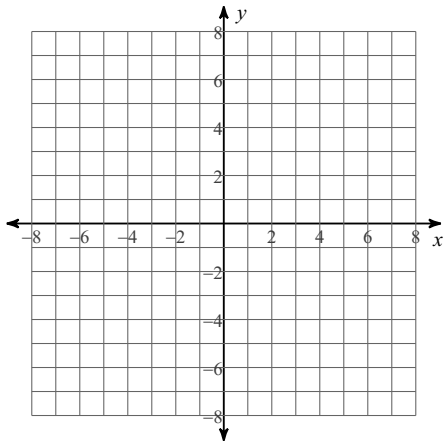
4) $f(x) = \log_5(x-1) + 4$



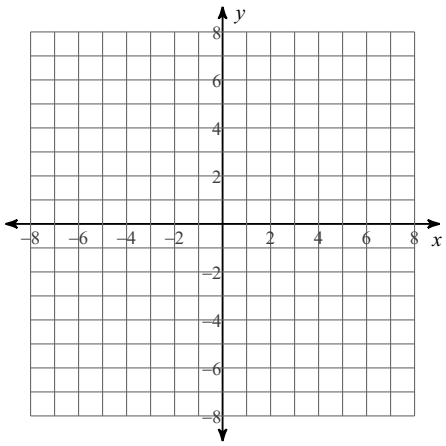
5) $f(x) = \log_3(x-1) - 4$



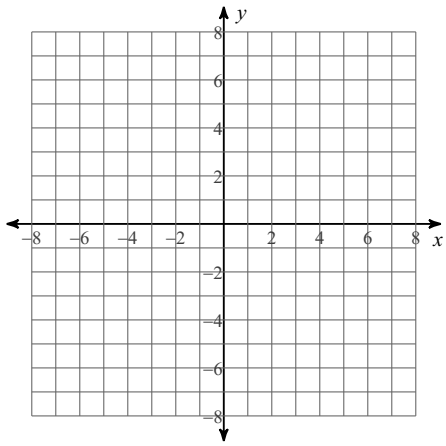
6) $f(x) = \log_5(x-3) - 1$



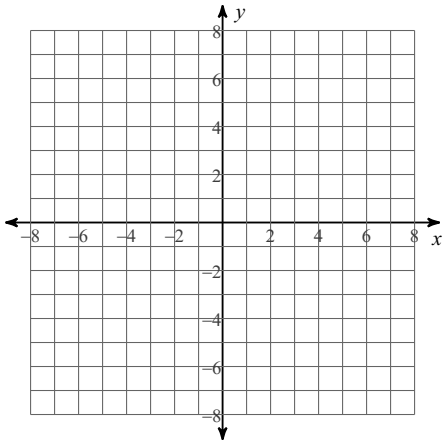
7) $f(x) = \log_3 (x - 1) + 2$



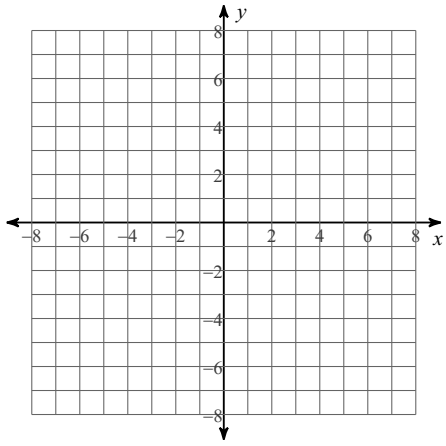
8) $f(x) = \log_3 (x - 1) + 3$



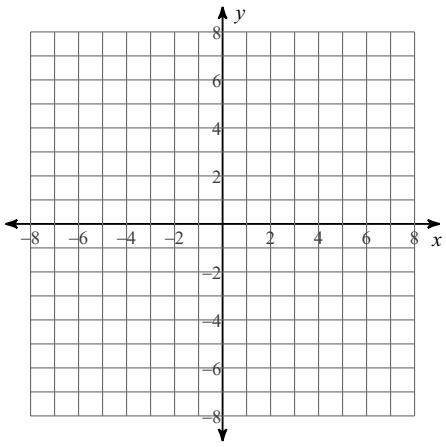
9) $f(x) = \log_5 (x - 3)$



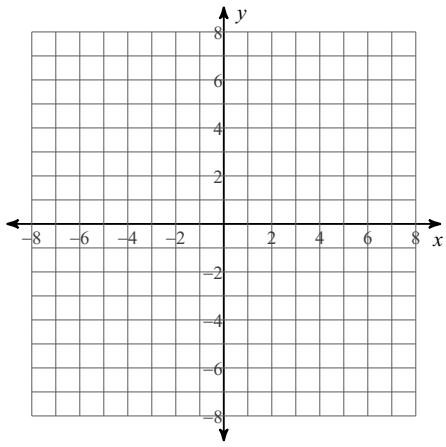
10) $f(x) = \log_2 (x - 3) - 3$



11) $f(x) = \log_{\frac{1}{2}} (x - 1) + 4$

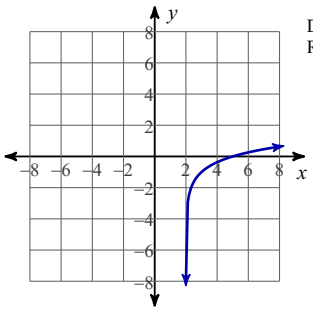


12) $f(x) = \log_{\frac{1}{5}} (x - 3) + 1$



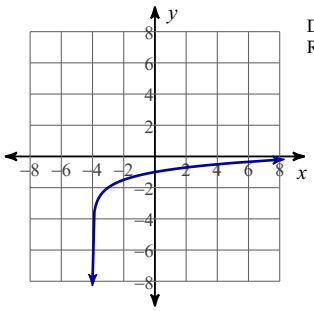
Answers to Graphing logarithmic functions practice (M3 2.3)

1)



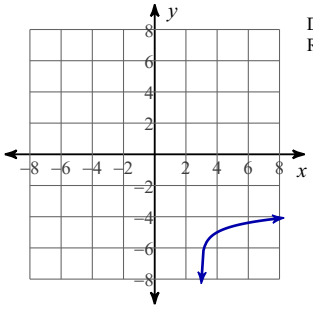
Domain: $x > 2$
Range: All reals

2)



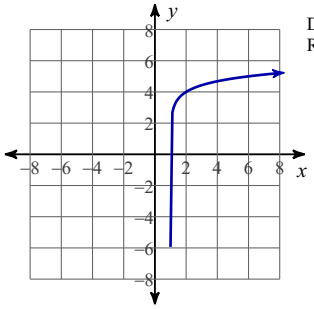
Domain: $x > -4$
Range: All reals

3)



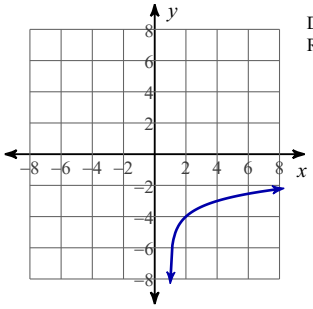
Domain: $x > 3$
Range: All reals

4)



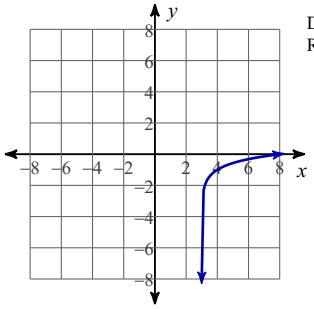
Domain: $x > 1$
Range: All reals

5)



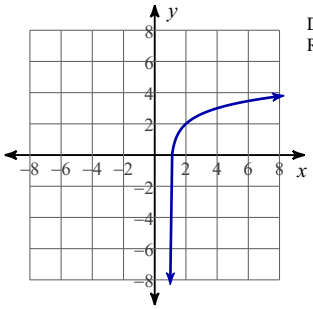
Domain: $x > 1$
Range: All reals

6)



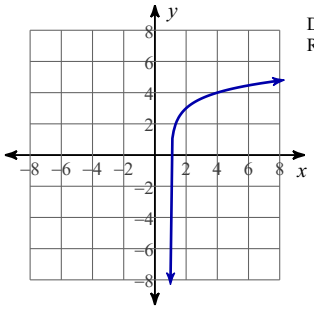
Domain: $x > 3$
Range: All reals

7)



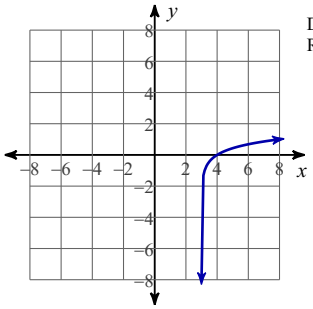
Domain: $x > 1$
Range: All reals

8)



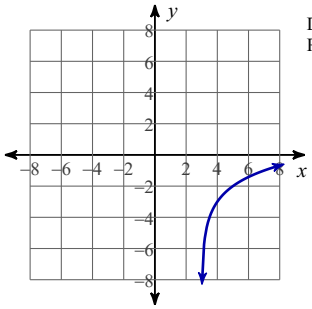
Domain: $x > 1$
Range: All reals

9)



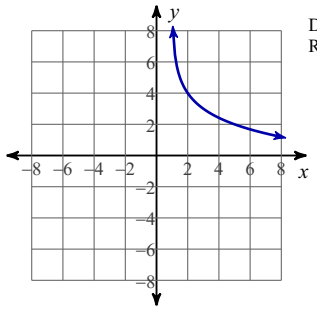
Domain: $x > 3$
Range: All reals

10)



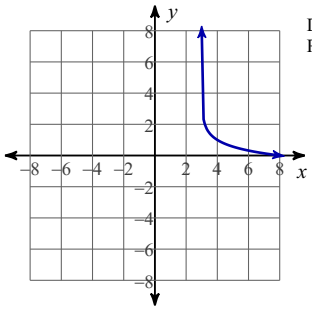
Domain: $x > 3$
Range: All reals

11)



Domain: $x > 1$
Range: All reals

12)



Domain: $x > 3$
Range: All reals