

Graph Logarithmic Functions

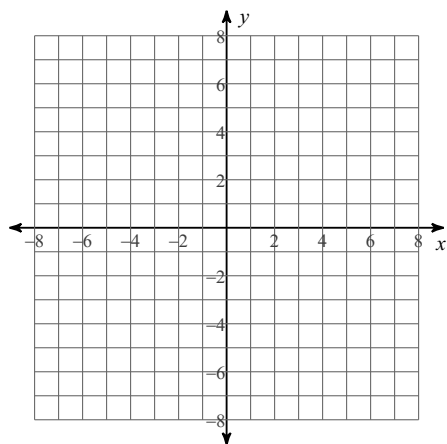
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Name _____

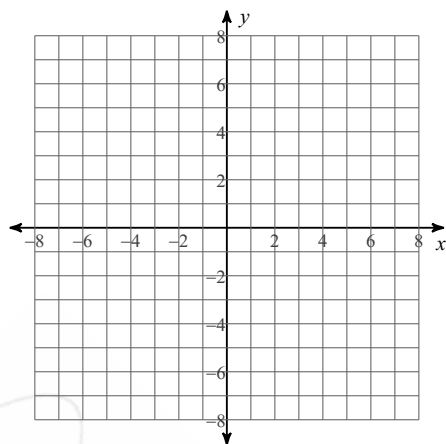
Date _____

Identify the domain and range of each. Then sketch the graph.

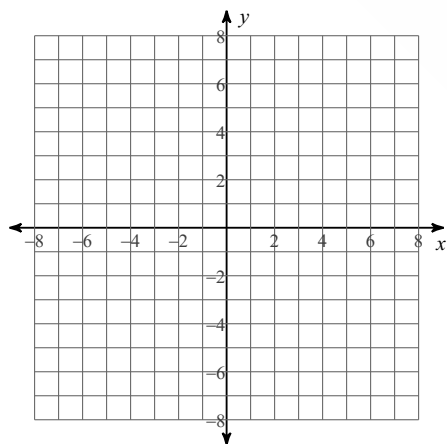
1) $y = \log_4 (x - 1) + 3$



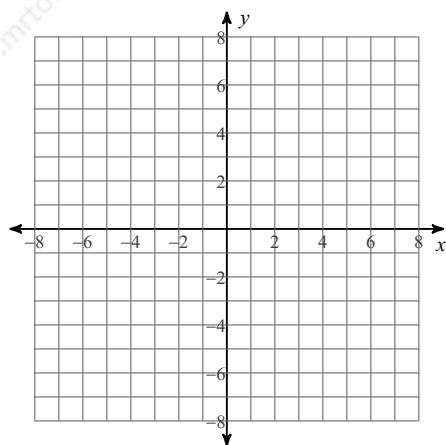
2) $y = \log_3 (x + 6) + 4$



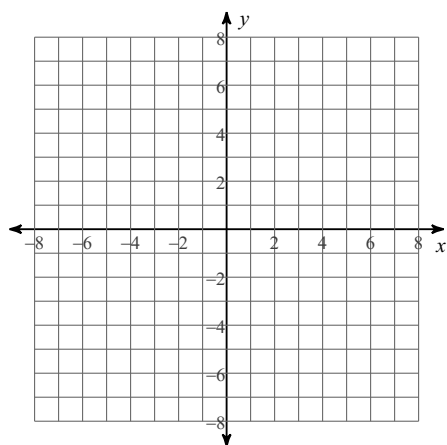
3) $y = \log_{\frac{1}{3}} (x - 3) + 1$



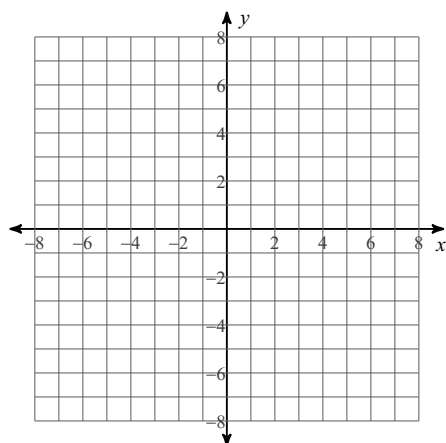
4) $y = \log_3 (x + 2)$



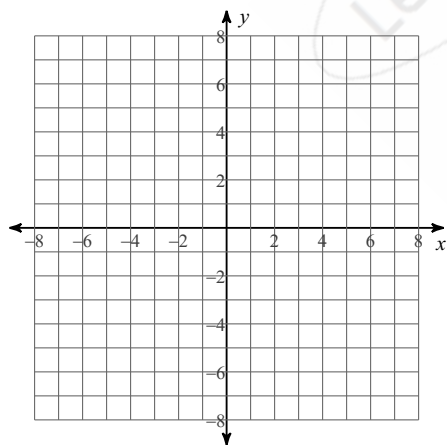
5) $y = \log(x + 5) - 4$



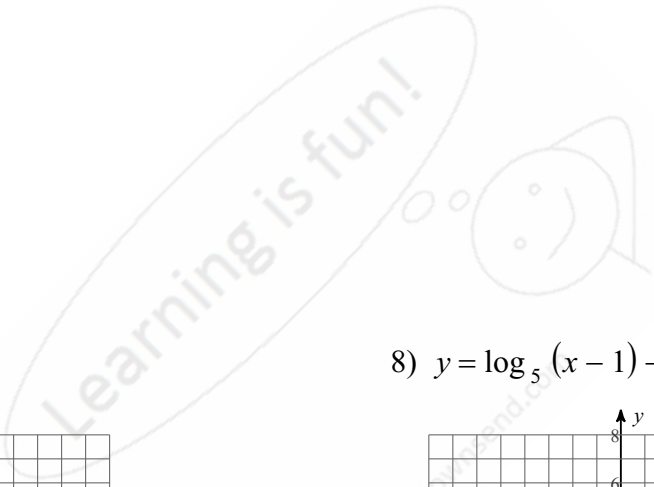
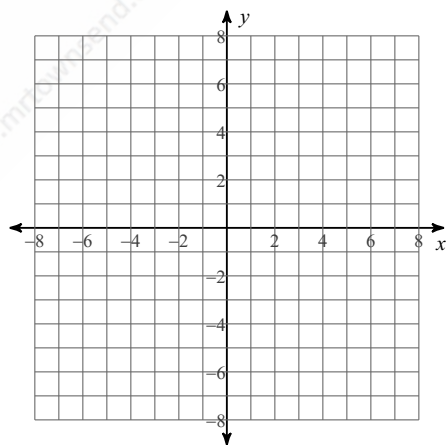
6) $y = \log_4(x - 1) - 5$



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



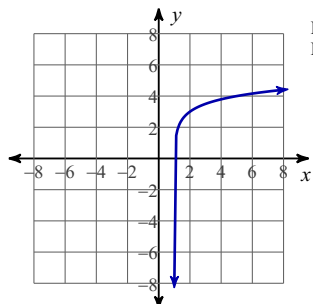
8) $y = \log_5(x - 1) - 1$



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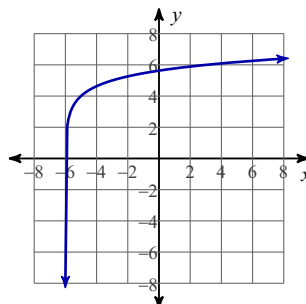
Answers to Graph Logarithmic Functions

1)



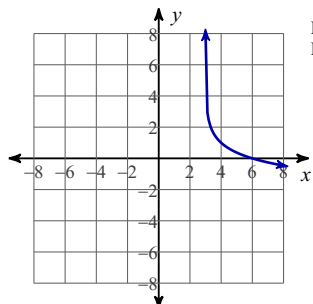
Domain: $x > 1$
Range: All reals

2)



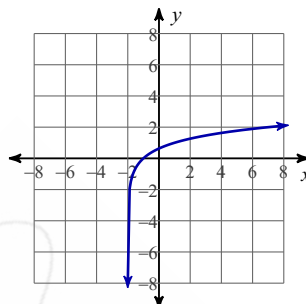
Domain: $x > -6$
Range: All reals

3)



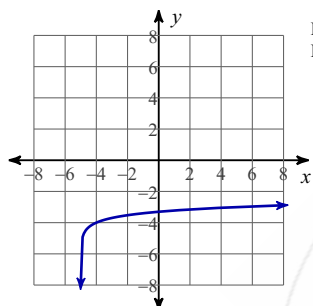
Domain: $x > 3$
Range: All reals

4)



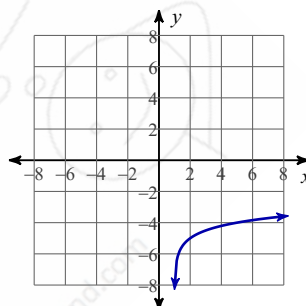
Domain: $x > -2$
Range: All reals

5)



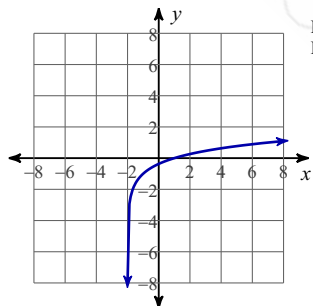
Domain: $x > -5$
Range: All reals

6)



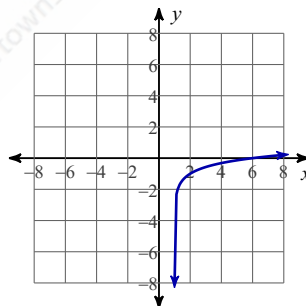
Domain: $x > 1$
Range: All reals

7)



Domain: $x > -2$
Range: All reals

8)



Domain: $x > 1$
Range: All reals