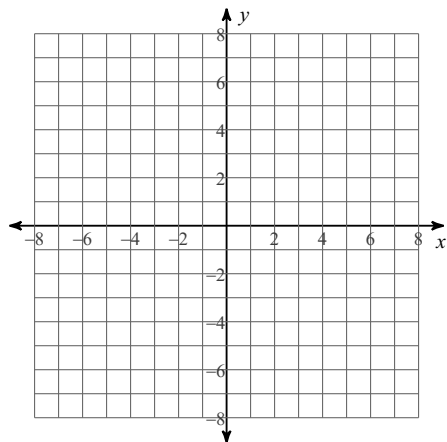


Graphing Logarithmic Functions

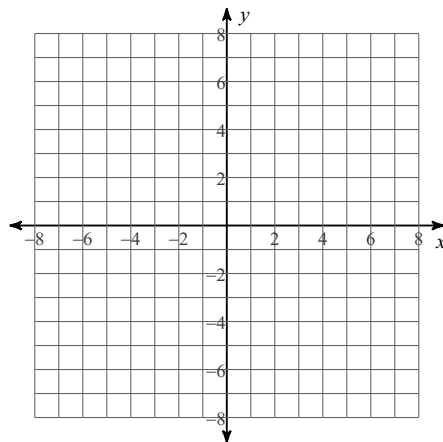
Date _____ Block _____

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

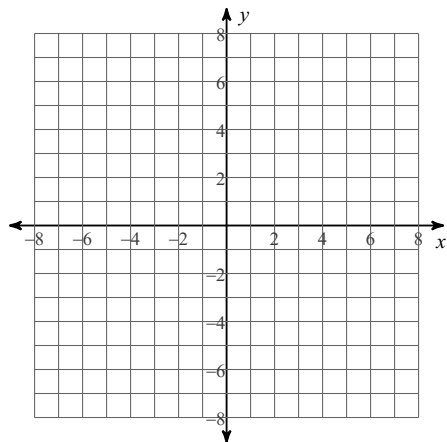
1) $y = \log_3(x + 5) + 2$



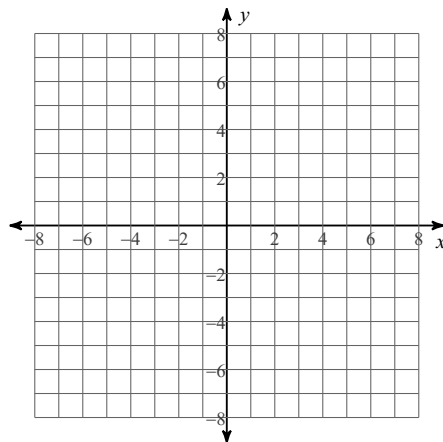
2) $y = \log_{\frac{1}{4}}(x - 1) + 3$



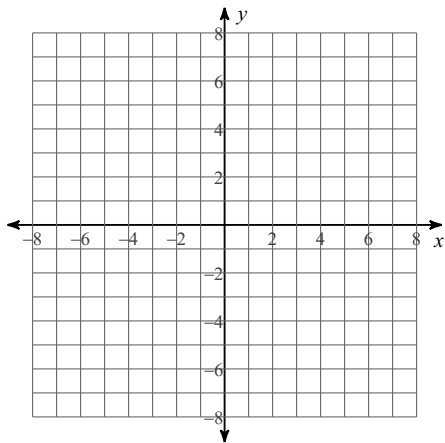
3) $y = \log_4(x - 1) - 2$



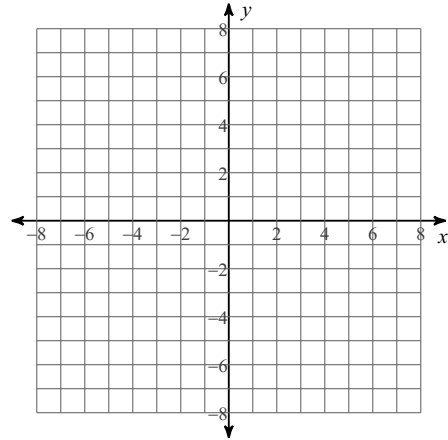
4) $y = \log_4(x - 1) + 2$



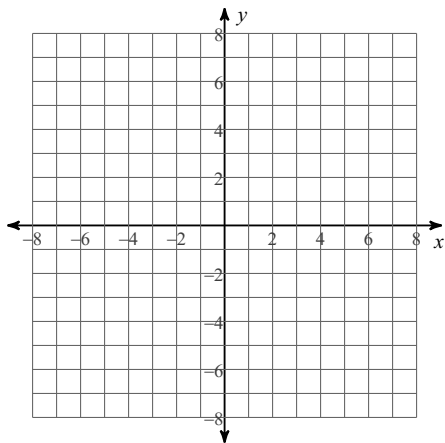
5) $y = \log_6 (x - 1) + 5$



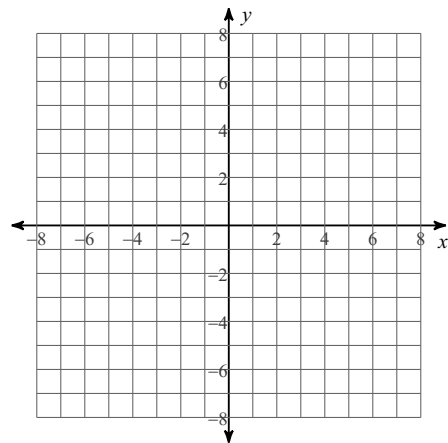
6) $y = \log_{\frac{1}{5}} (x + 1)$



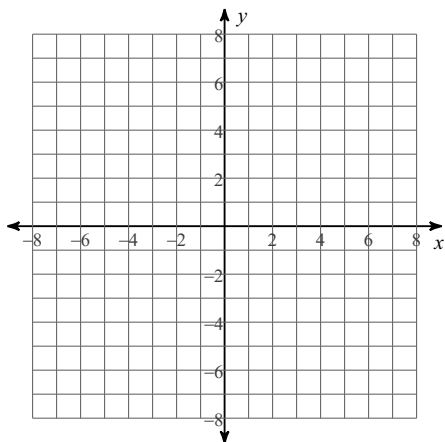
7) $y = \log_4 (x - 1) - 4$



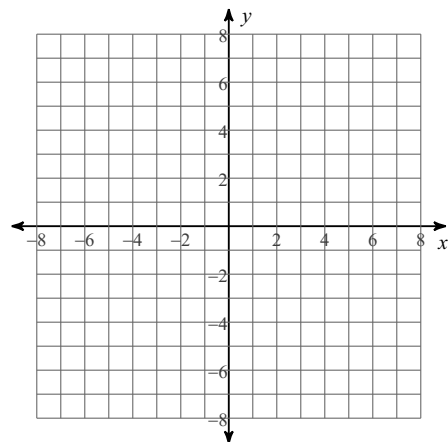
8) $y = \log_4 (x - 3) - 1$



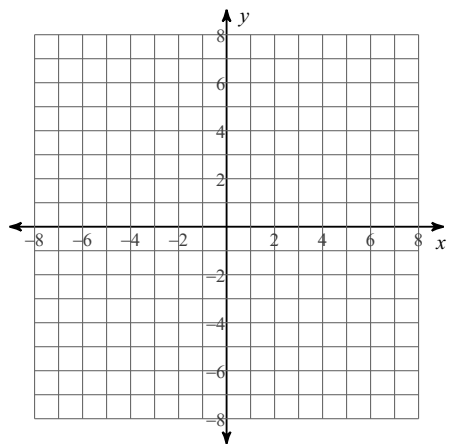
9) $y = \log_6 (x - 1) + 4$



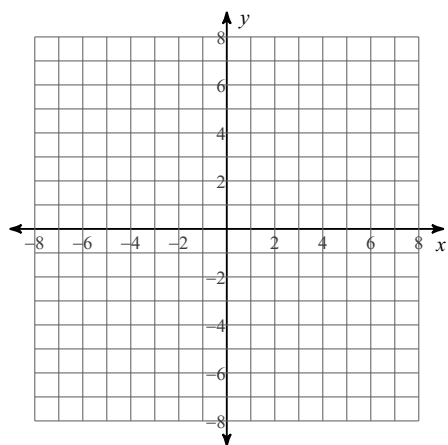
10) $y = \log_3 (x - 1) - 1$



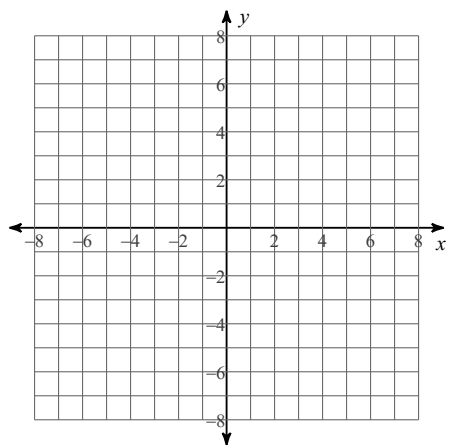
$$11) y = \log_{\frac{1}{5}}(x - 1) + 2$$



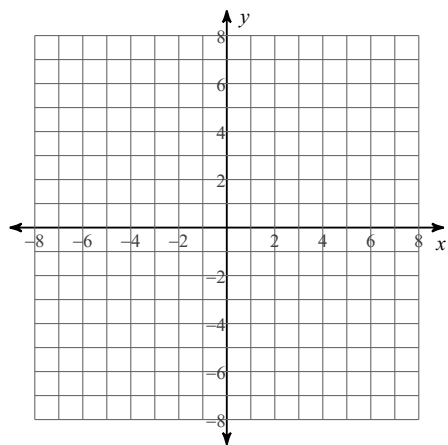
$$12) y = \log_6(x - 1) - 2$$



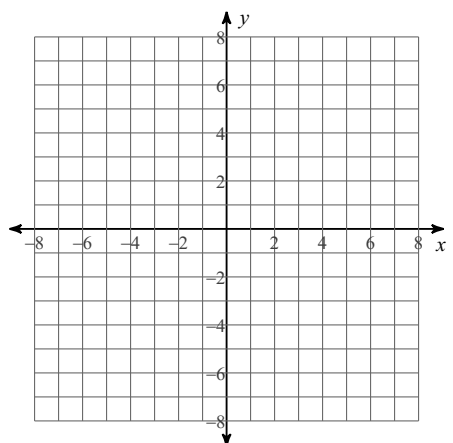
$$13) y = \log_3(x + 3) - 1$$



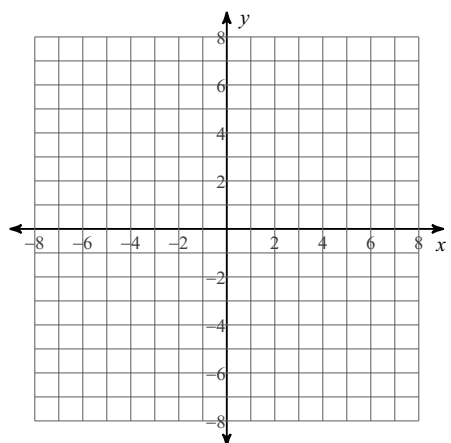
$$14) y = \log_{\frac{1}{4}}(x - 1) - 2$$



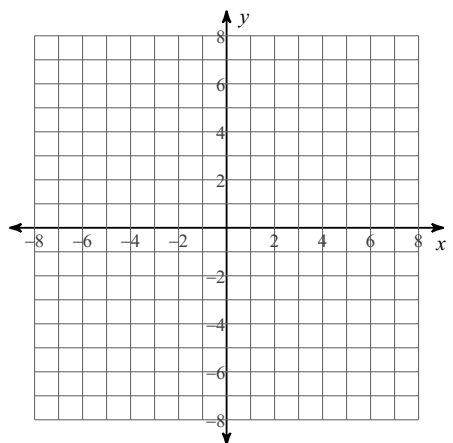
15) $y = \log_3 (x + 6) - 2$



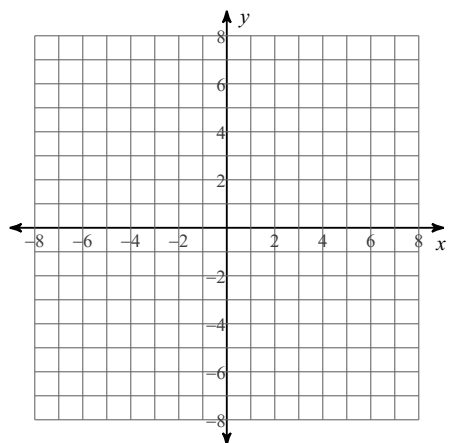
16) $y = \log_2 (x - 2) + 3$



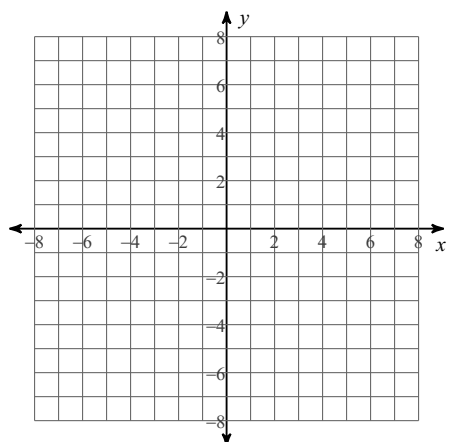
17) $y = \log_6 (x - 1) + 1$



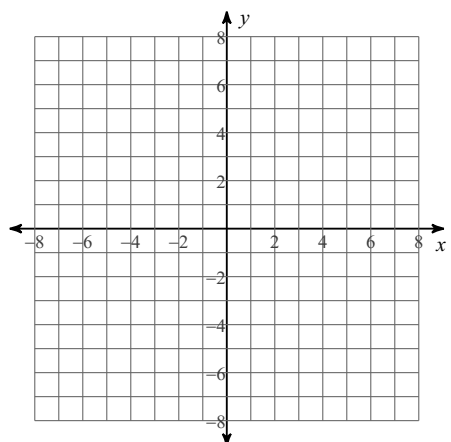
18) $y = \log_3 (x - 1) + 4$



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

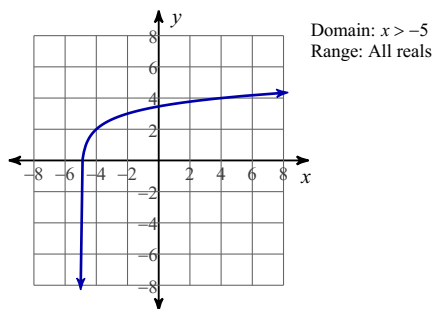


20) $y = \log_2 (x - 1)$

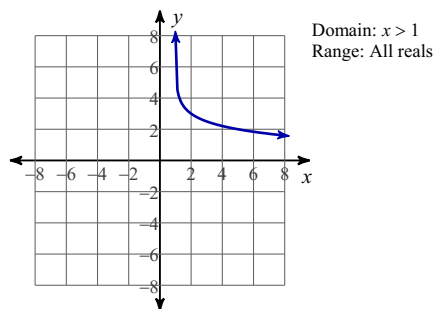


Answers to Graphing Logarithmic Functions (ID: 1)

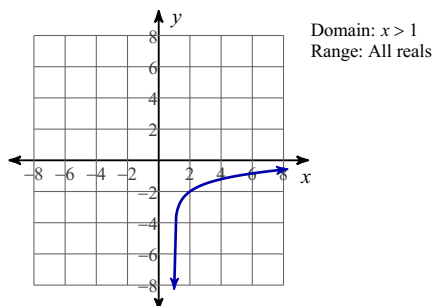
1)



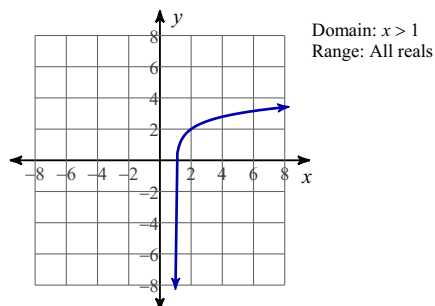
2)



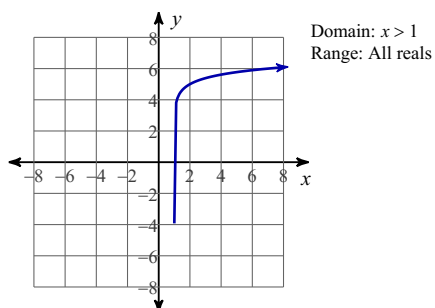
3)



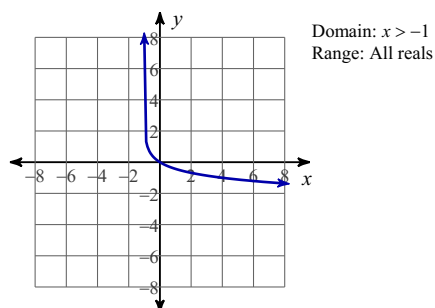
4)



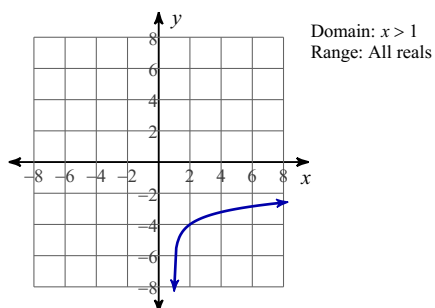
5)



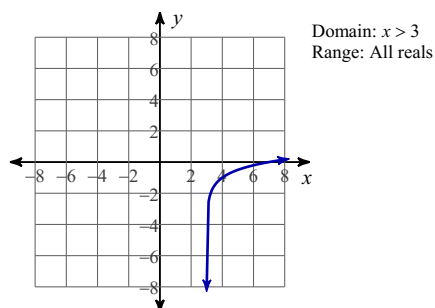
6)



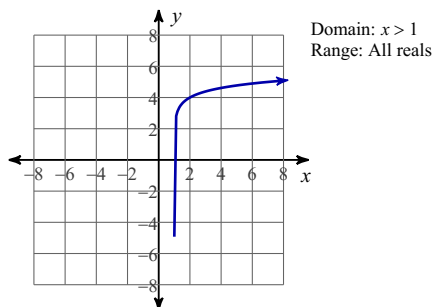
7)



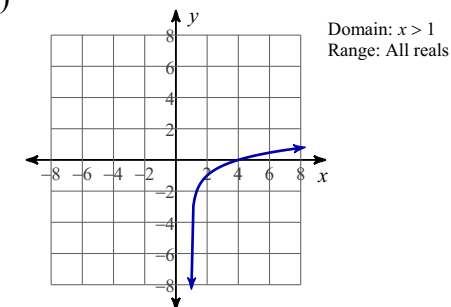
8)



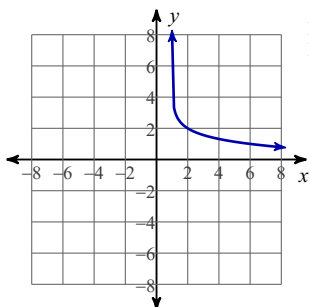
9)



10)

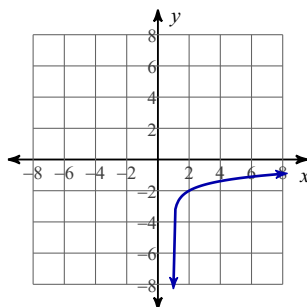


11)



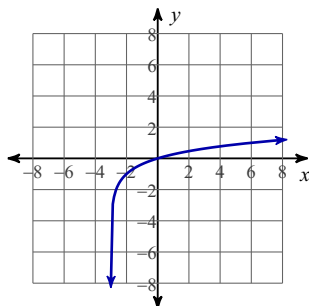
Domain: $x > 1$
Range: All reals

12)



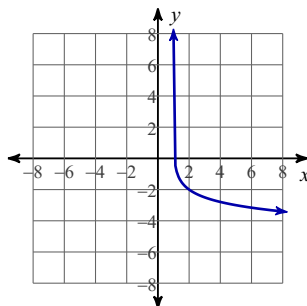
Domain: $x > 1$
Range: All reals

13)



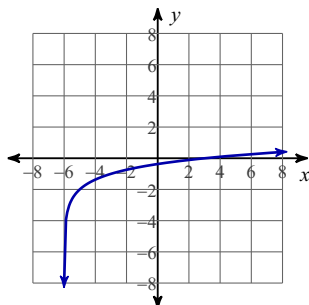
Domain: $x > -3$
Range: All reals

14)



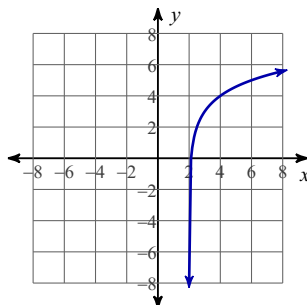
Domain: $x > 1$
Range: All reals

15)



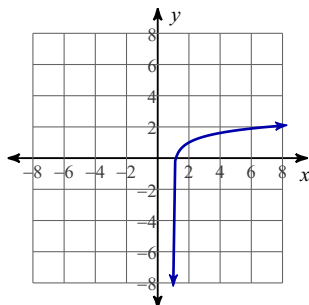
Domain: $x > -6$
Range: All reals

16)



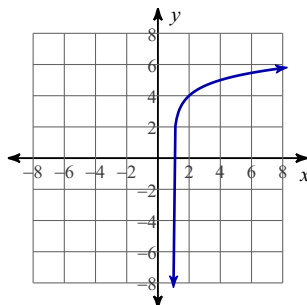
Domain: $x > 2$
Range: All reals

17)



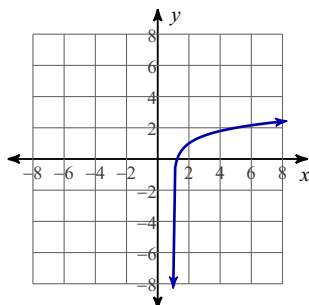
Domain: $x > 1$
Range: All reals

18)



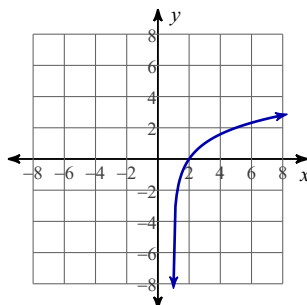
Domain: $x > 1$
Range: All reals

19)



Domain: $x > 1$
Range: All reals

20)



Domain: $x > 1$
Range: All reals