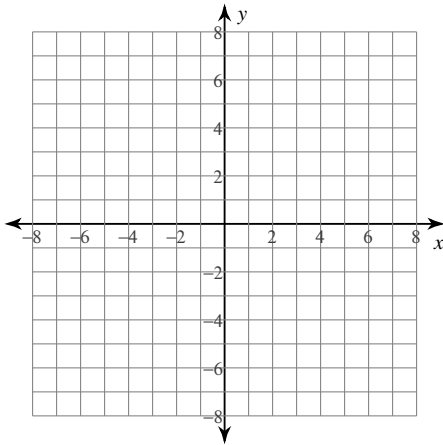


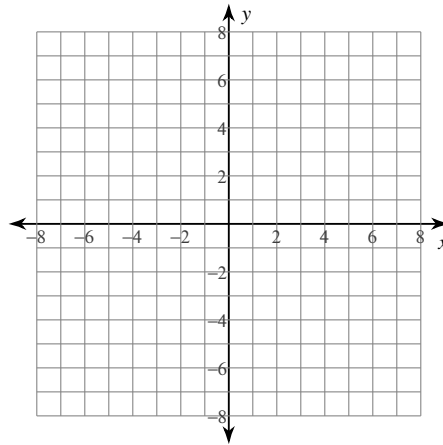
## Graphing Logarithms

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

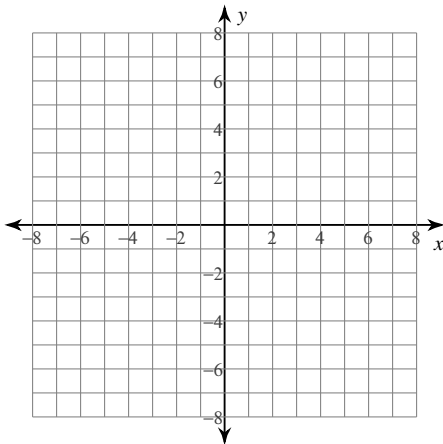
1)  $y = \log_6(x - 1) - 5$



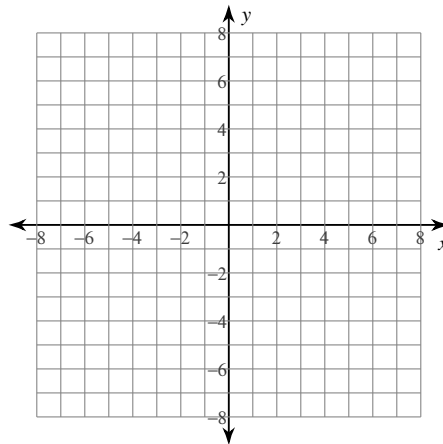
2)  $y = \log_5(x - 1) + 3$



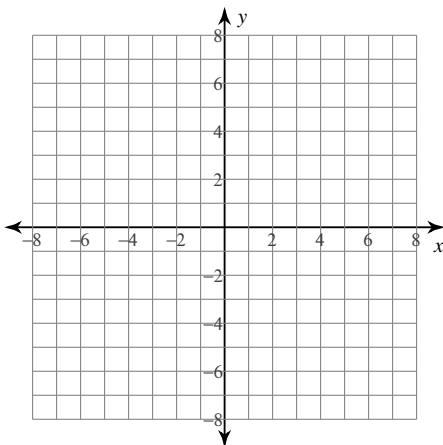
3)  $y = \log_6(x - 3) - 5$



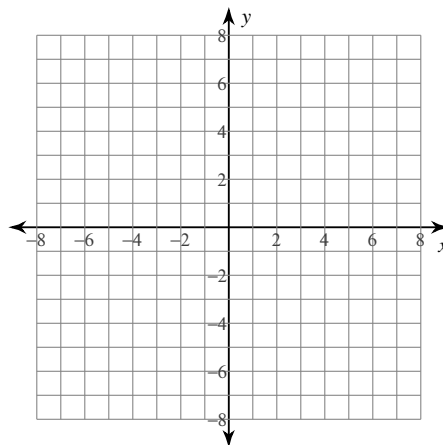
4)  $y = \log_2(x - 1) + 3$



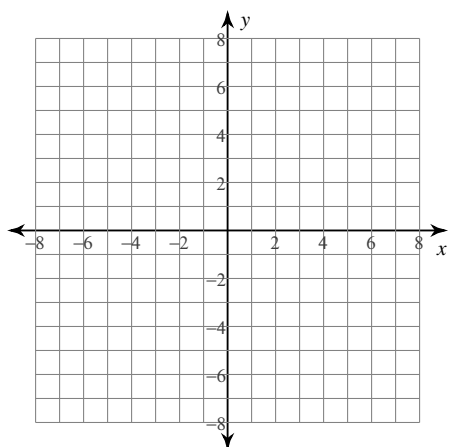
5)  $y = \log_4(x + 1) - 4$



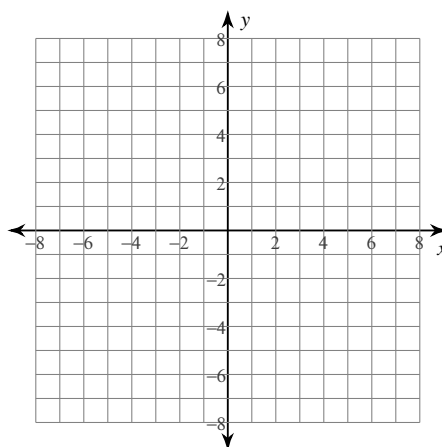
6)  $y = \log_5(x + 1) + 1$



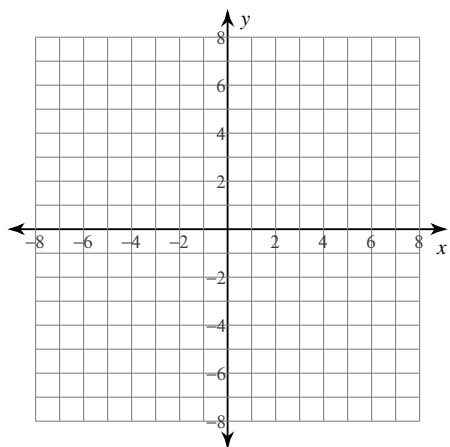
7)  $y = \log_4 (x + 2) + 1$



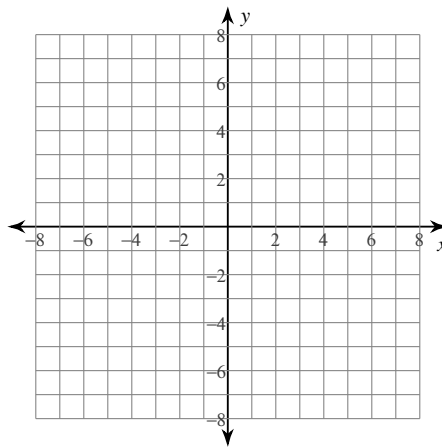
8)  $y = \log_6 (x - 2) + 1$



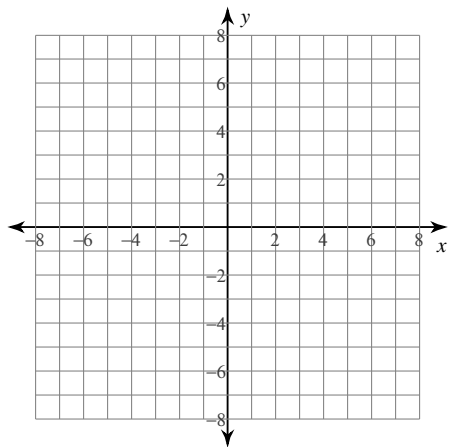
9)  $y = \log_4 (3x + 11) - 5$



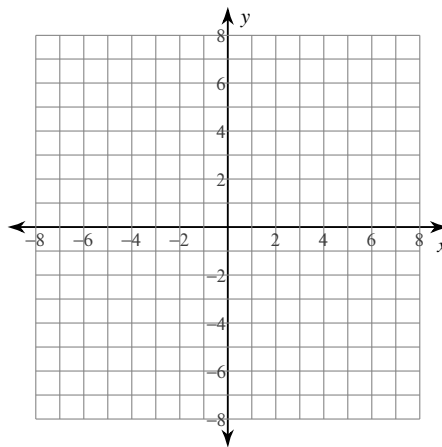
10)  $y = \log_5 (2x + 2) + 5$



11)  $y = \log_6 (3x + 14) + 1$



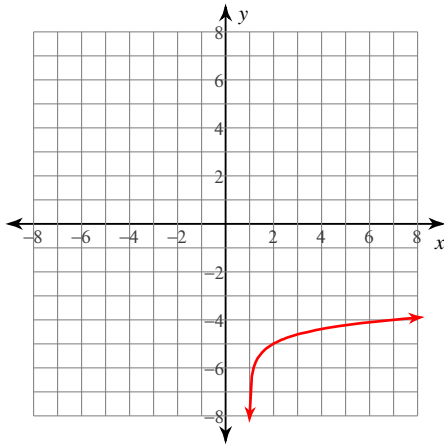
12)  $y = \log_2 (4x - 11) - 2$



## Graphing Logarithms

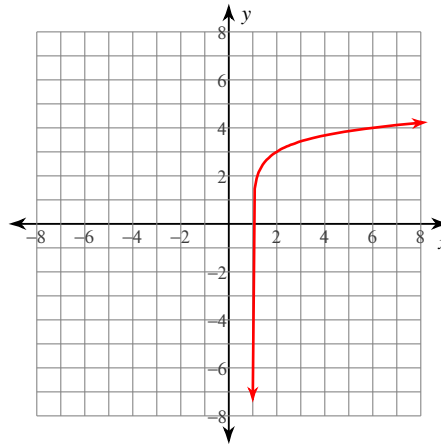
Identify the domain and range of each. Then sketch the graph.

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



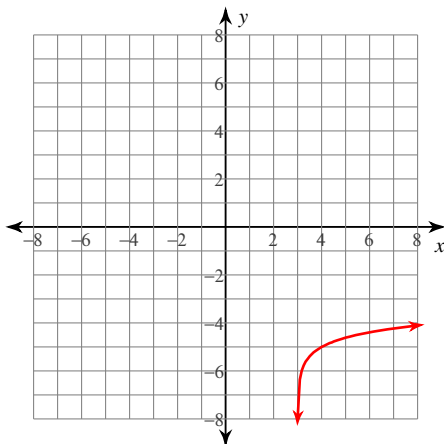
Domain:  $x > 1$   
Range: All reals

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



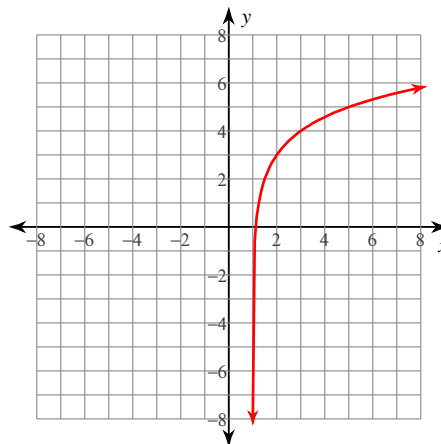
Domain:  $x > 1$   
Range: All reals

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



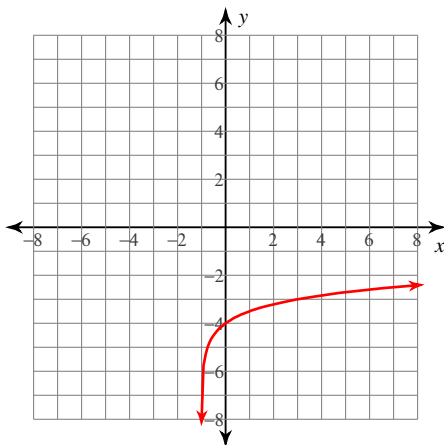
Domain:  $x > 3$   
Range: All reals

4)  $y = \log_2(x - 1) + 3$



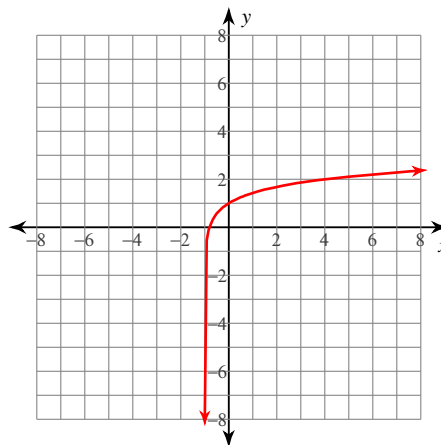
Domain:  $x > 1$   
Range: All reals

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



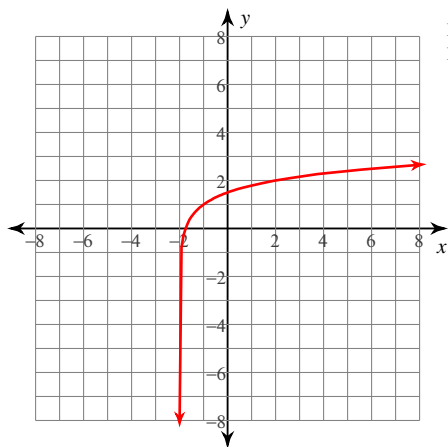
Domain:  $x > -1$   
Range: All reals

6)  $y = \log_5(x + 1) + 1$



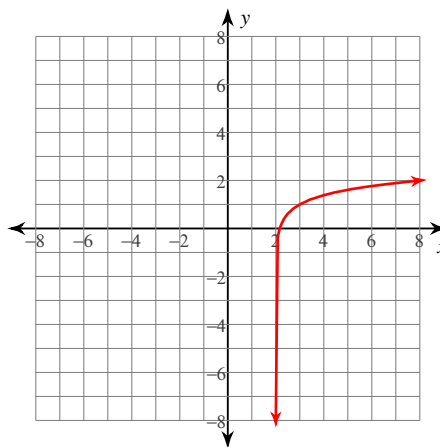
Domain:  $x > -1$   
Range: All reals

7)  $y = \log_4 (x + 2) + 1$



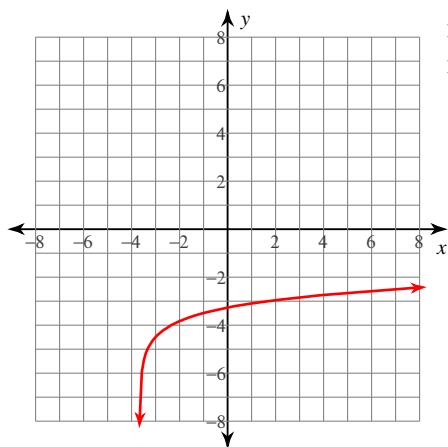
Domain:  $x > -2$   
Range: All reals

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



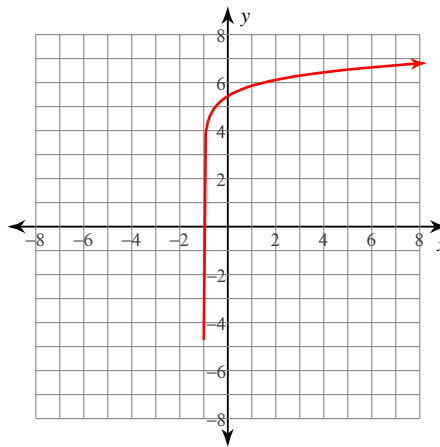
Domain:  $x > 2$   
Range: All reals

9)  $y = \log_4 (3x + 11) - 5$



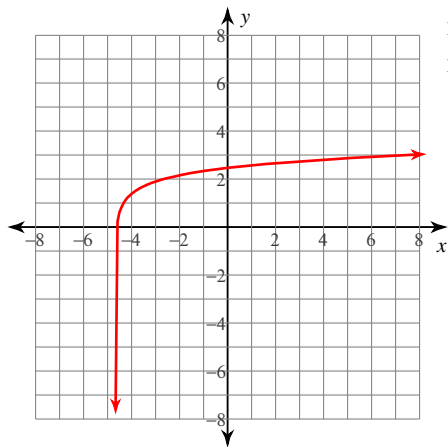
Domain:  $x > -\frac{11}{3}$   
Range: All reals

10)  $y = \log_5 (2x + 2) + 5$



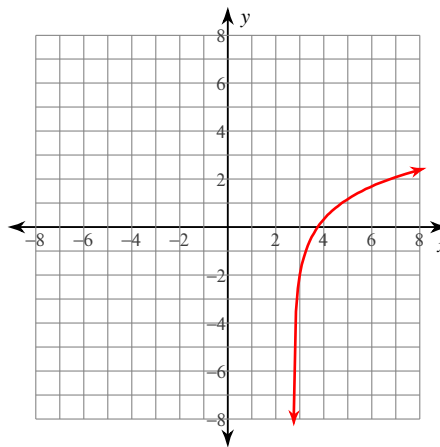
Domain:  $x > -1$   
Range: All reals

11)  $y = \log_6 (3x + 14) + 1$



Domain:  $x > -\frac{14}{3}$   
Range: All reals

12)  $y = \log_2 (4x - 11) - 2$



Domain:  $x > \frac{11}{4}$   
Range: All reals