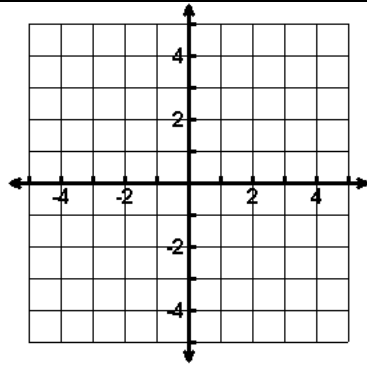


1.  $y = \log_5(x-1)$



Transformations \_\_\_\_\_

State 3 points on Graph \_\_\_\_\_

Domain \_\_\_\_\_ Range \_\_\_\_\_

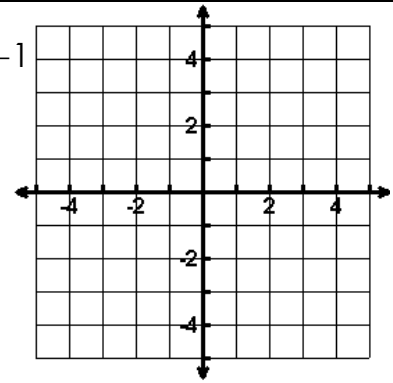
Asymptote \_\_\_\_\_

X-intercept \_\_\_\_\_ Y-intercept \_\_\_\_\_

Increasing or Decreasing

 End Behavior  $x \rightarrow \_\_\_\_\_, f(x) \rightarrow \_\_\_\_\_$   
 $x \rightarrow \_\_\_\_\_, f(x) \rightarrow \_\_\_\_\_$ 

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



Transformations \_\_\_\_\_

State 3 points on Graph \_\_\_\_\_

Domain \_\_\_\_\_ Range \_\_\_\_\_

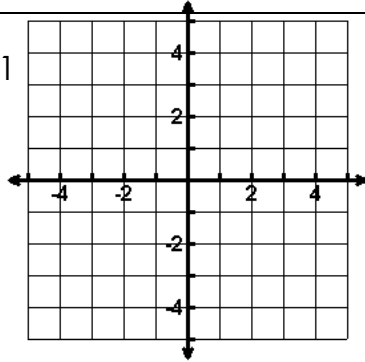
Asymptote \_\_\_\_\_

X-intercept \_\_\_\_\_ Y-intercept \_\_\_\_\_

Increasing or Decreasing

 End Behavior  $x \rightarrow \_\_\_\_\_, f(x) \rightarrow \_\_\_\_\_$   
 $x \rightarrow \_\_\_\_\_, f(x) \rightarrow \_\_\_\_\_$ 

3.  $y = -\log_3(x-1) - 1$



Transformations \_\_\_\_\_

State 3 points on Graph \_\_\_\_\_

Domain \_\_\_\_\_ Range \_\_\_\_\_

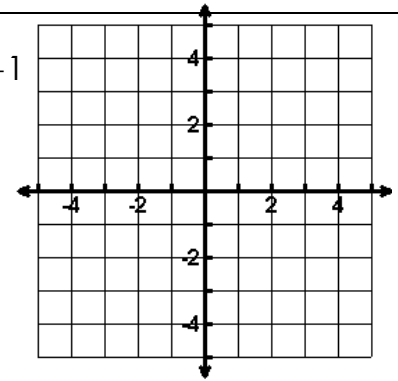
Asymptote \_\_\_\_\_

X-intercept \_\_\_\_\_ Y-intercept \_\_\_\_\_

Increasing or Decreasing

 End Behavior  $x \rightarrow \_\_\_\_\_, f(x) \rightarrow \_\_\_\_\_$   
 $x \rightarrow \_\_\_\_\_, f(x) \rightarrow \_\_\_\_\_$ 

4.  $y = \log_3(x+2) + 1$



Transformations \_\_\_\_\_

State 3 points on Graph \_\_\_\_\_

Domain \_\_\_\_\_ Range \_\_\_\_\_

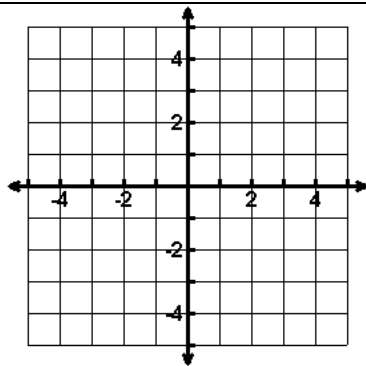
Asymptote \_\_\_\_\_

X-intercept \_\_\_\_\_ Y-intercept \_\_\_\_\_

Increasing or Decreasing

 End Behavior  $x \rightarrow \_\_\_\_\_, f(x) \rightarrow \_\_\_\_\_$   
 $x \rightarrow \_\_\_\_\_, f(x) \rightarrow \_\_\_\_\_$

5.  $y = \log_2(x - 2)$



Transformations \_\_\_\_\_

State 3 points on Graph \_\_\_\_\_

Domain \_\_\_\_\_ Range \_\_\_\_\_

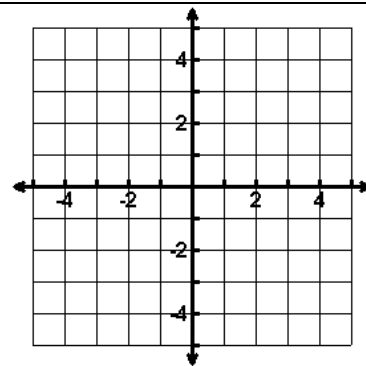
Asymptote \_\_\_\_\_

X-intercept \_\_\_\_\_ Y-intercept \_\_\_\_\_

Increasing or Decreasing

End Behavior  $x \rightarrow \_\_\_\_, f(x) \rightarrow \_\_\_\_$   
 $x \rightarrow \_\_\_\_, f(x) \rightarrow \_\_\_\_$

6.  $y = \log_{\frac{1}{2}}(x + 2)$



Transformations \_\_\_\_\_

State 3 points on Graph \_\_\_\_\_

Domain \_\_\_\_\_ Range \_\_\_\_\_

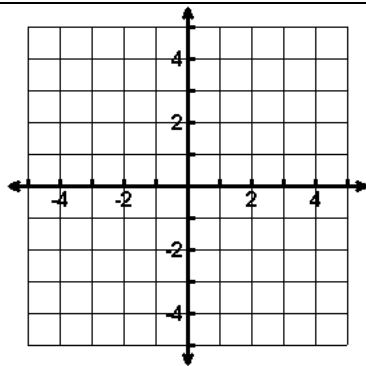
Asymptote \_\_\_\_\_

X-intercept \_\_\_\_\_ Y-intercept \_\_\_\_\_

Increasing or Decreasing

End Behavior  $x \rightarrow \_\_\_\_, f(x) \rightarrow \_\_\_\_$   
 $x \rightarrow \_\_\_\_, f(x) \rightarrow \_\_\_\_$

7.  $y = \log_3(-x)$



Transformations \_\_\_\_\_

State 3 points on Graph \_\_\_\_\_

Domain \_\_\_\_\_ Range \_\_\_\_\_

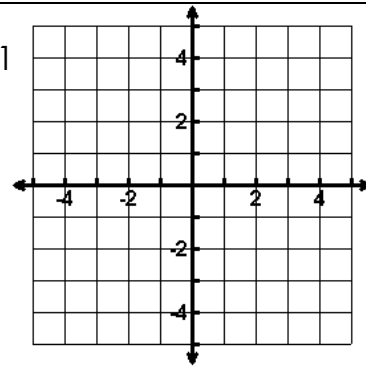
Asymptote \_\_\_\_\_

X-intercept \_\_\_\_\_ Y-intercept \_\_\_\_\_

Increasing or Decreasing

End Behavior  $x \rightarrow \_\_\_\_, f(x) \rightarrow \_\_\_\_$   
 $x \rightarrow \_\_\_\_, f(x) \rightarrow \_\_\_\_$

8.  $y = -\log_2(x - 2) + 1$



Transformations \_\_\_\_\_

State 3 points on Graph \_\_\_\_\_

Domain \_\_\_\_\_ Range \_\_\_\_\_

Asymptote \_\_\_\_\_

X-intercept \_\_\_\_\_ Y-intercept \_\_\_\_\_

Increasing or Decreasing

End Behavior  $x \rightarrow \_\_\_\_, f(x) \rightarrow \_\_\_\_$   
 $x \rightarrow \_\_\_\_, f(x) \rightarrow \_\_\_\_$