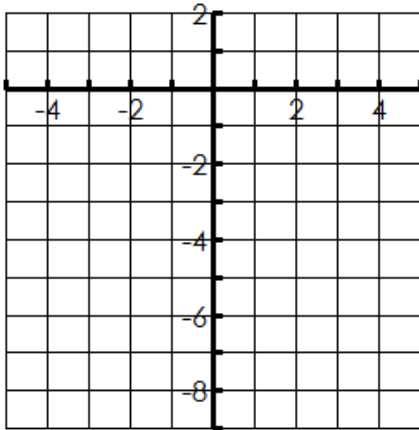


Name: _____

Date: _____

1. $y = \ln x - 3$



Transformations: _____

State 3 points on Graph _____

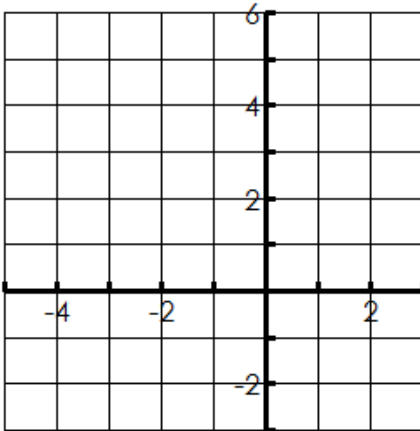
Domain _____ Range _____

Asymptote _____ Increasing or Decreasing

X-intercept _____ Y-intercept _____

End Behavior $x \rightarrow \text{_____}, f(x) \rightarrow \text{_____}$
 $x \rightarrow \text{_____}, f(x) \rightarrow \text{_____}$

2. $y = \ln(x + 3)$



Transformations: _____

State 3 points on Graph _____

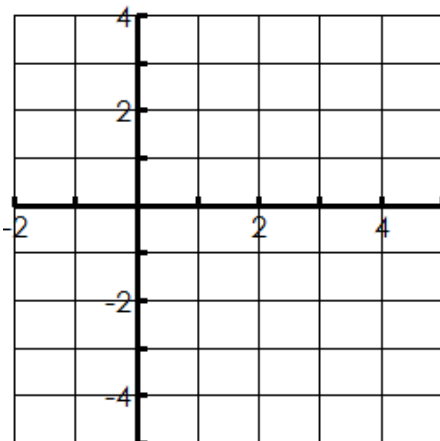
Domain _____ Range _____

Asymptote _____ Increasing or Decreasing

X-intercept _____ Y-intercept _____

End Behavior $x \rightarrow \text{_____}, f(x) \rightarrow \text{_____}$
 $x \rightarrow \text{_____}, f(x) \rightarrow \text{_____}$

3. $y = \ln(x - 2) - 3$



Transformations: _____

State 3 points on Graph _____

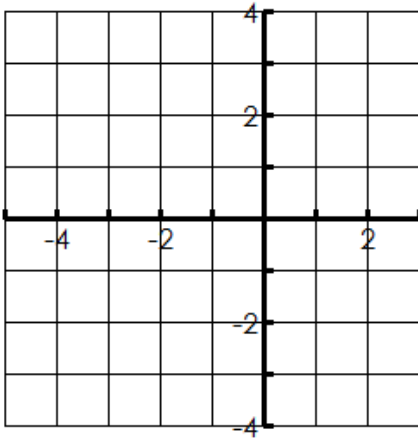
Domain _____ Range _____

Asymptote _____ Increasing or Decreasing

X-intercept _____ Y-intercept _____

End Behavior $x \rightarrow \text{_____}, f(x) \rightarrow \text{_____}$
 $x \rightarrow \text{_____}, f(x) \rightarrow \text{_____}$

4. $y = -\ln(x + 1) + 1$



Transformations: _____

State 3 points on Graph _____

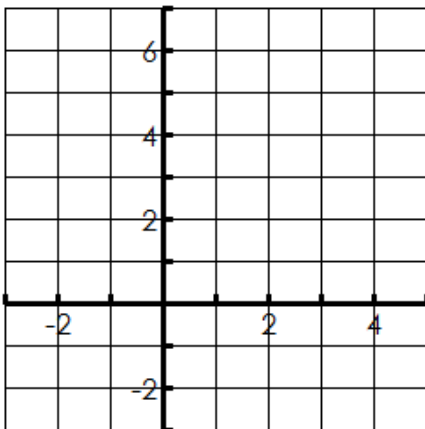
Domain _____ Range _____

Asymptote _____ Increasing or Decreasing _____

X-intercept _____ Y-intercept _____

End Behavior $x \rightarrow \text{_____}, f(x) \rightarrow \text{_____}$
 $x \rightarrow \text{_____}, f(x) \rightarrow \text{_____}$

5. $y = \ln(x - 3) + 1$



Transformations: _____

State 3 points on Graph _____

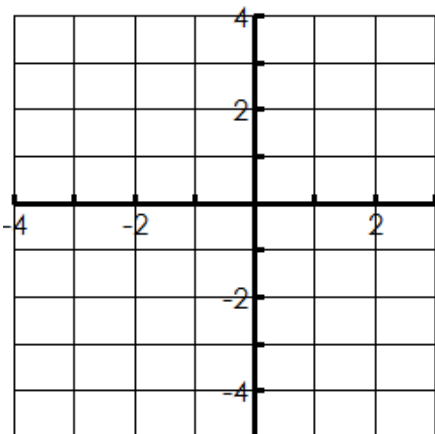
Domain _____ Range _____

Asymptote _____ Increasing or Decreasing _____

X-intercept _____ Y-intercept _____

End Behavior $x \rightarrow \text{_____}, f(x) \rightarrow \text{_____}$
 $x \rightarrow \text{_____}, f(x) \rightarrow \text{_____}$

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



Transformations: _____

State 3 points on Graph _____

Domain _____ Range _____

Asymptote _____ Increasing or Decreasing _____

X-intercept _____ Y-intercept _____

End Behavior $x \rightarrow \text{_____}, f(x) \rightarrow \text{_____}$
 $x \rightarrow \text{_____}, f(x) \rightarrow \text{_____}$