

9.4 CA - Intro to Logarithms

Rewrite each equation in exponential form.

1) $\log_{64} 2 = \frac{1}{6}$

2) $\log_{12} 144 = 2$

Rewrite each equation in logarithmic form.

3) $19^2 = 361$

4) $16^{\frac{1}{2}} = 4$

Evaluate each expression.

5) $\log_3 243$

6) $\log_4 64$

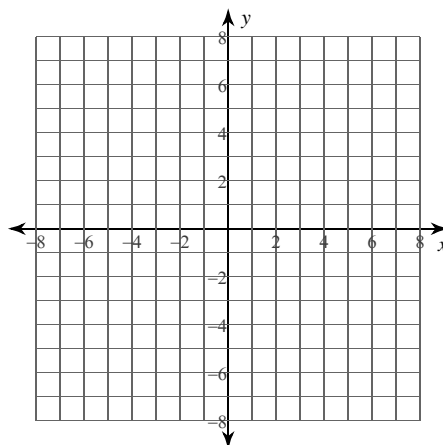
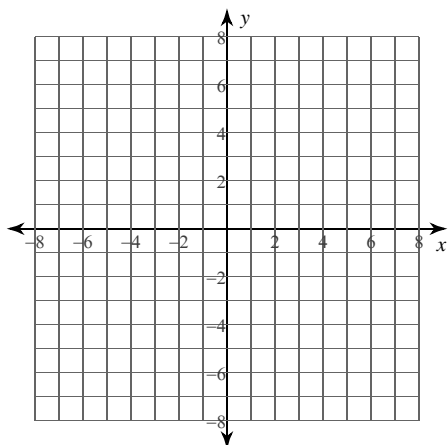
7) $\log_{64} \frac{1}{4}$

8) $\log_3 \frac{1}{81}$

Sketch the graph and identify the domain and range of each. Include the vertical asymptote on your graph.

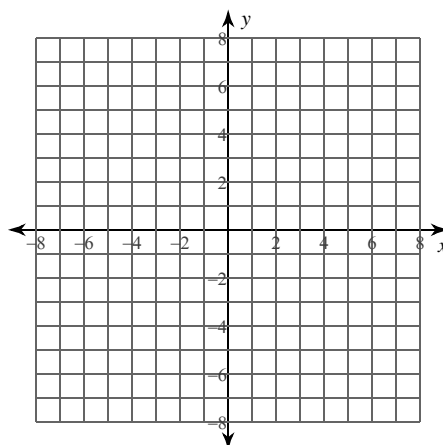
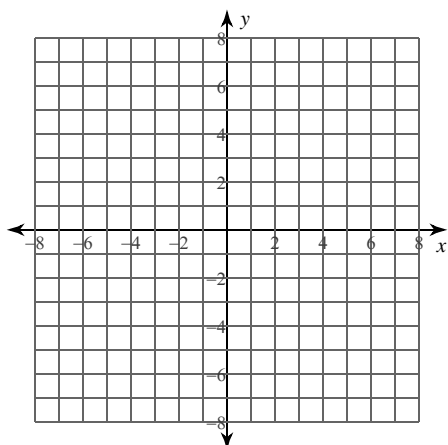
9) $f(x) = \log_6 (x - 1)$

10) $f(x) = \log_2 (x - 1) - 1$



11) $f(x) = \log_5 (x + 1) - 4$

12) $f(x) = \log_4 (x - 1) + 4$



Answers to 9.4 CA - Intro to Logarithms (ID: 1)

1) $64^{\frac{1}{6}} = 2$

2) $12^2 = 144$

3) $\log_{19} 361 = 2$

4) $\log_{16} 4 = \frac{1}{2}$

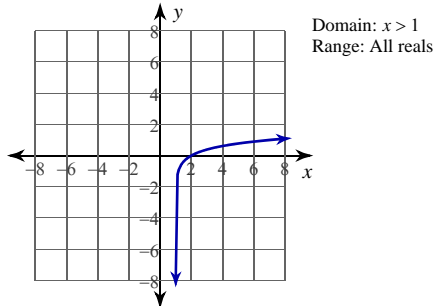
5) 5

6) 3

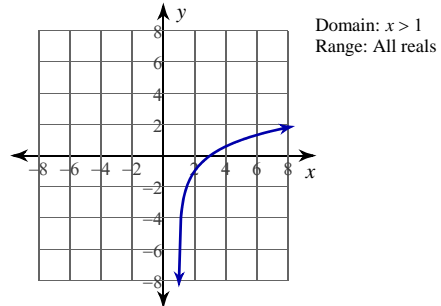
7) $-\frac{1}{3}$

8) -4

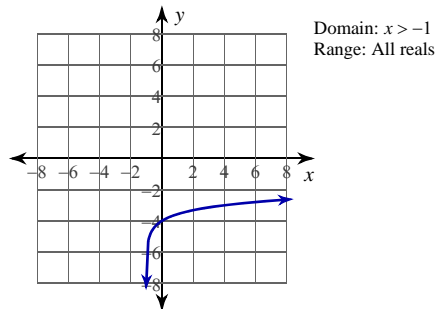
9)



10)



11)



12)

