

Name:

Date:

Period:

Score: First attempt due:

Final corrections due:

Practice Worksheet:

Graphing Logarithmic Functions

Without a calculator, match each function with its graph.

_____ 1. $f(x) = \log_2 x$

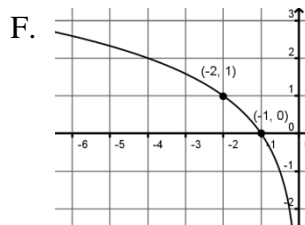
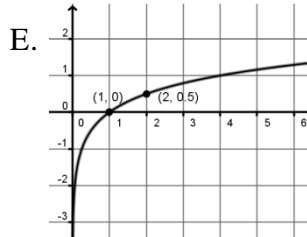
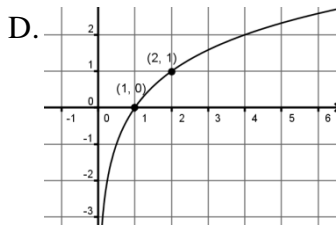
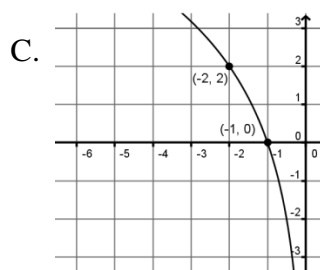
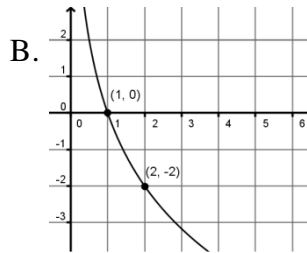
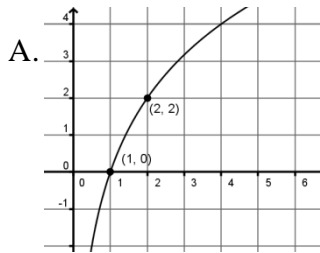
_____ 2. $f(x) = \log_2(-x)$

_____ 3. $f(x) = 2 \log_2 x$

_____ 4. $f(x) = \frac{1}{2} \log_2 x$

_____ 5. $f(x) = 2 \log_2(-x)$

_____ 6. $f(x) = -2 \log_2 x$



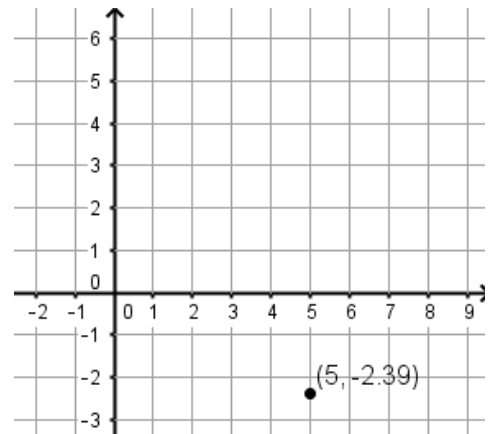
Graph without a calculator by finding all info below. Label all points and dash in asymptote on graph.

7. $f(x) = 3 \log_{\frac{1}{3}} x + 2$

a = b = c = h = k = Domain:

Asymptote: Range:

Anchor points	Multiply y by ____	Divide x by ____	Add ____ to x	Add ____ to y
(, 0)				
(, 1)				
(, -1)				

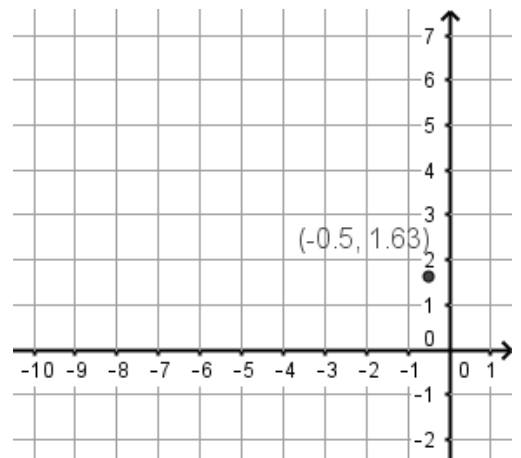


8. $f(x) = -\log_3 \left(-\frac{1}{3}x\right)$

a = b = c = h = k = Domain:

Asymptote: Range:

Anchor points	Multiply y by ____	Divide x by ____	Add ____ to x	Add ____ to y
(, 0)				
(, 1)				
(, -1)				

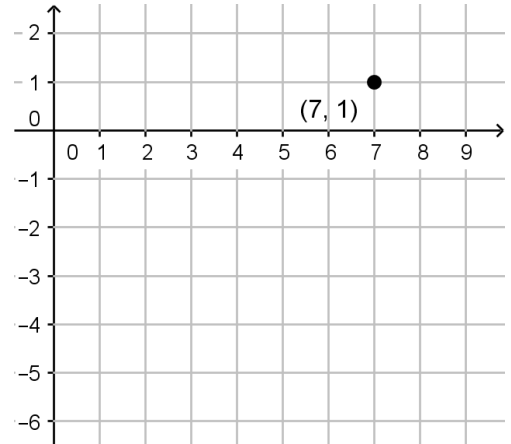


$$9. f(x) = -2 \log_{\frac{1}{2}}(x - 3) - 3$$

a = b = c = h = k = Domain:

Asymptote: Range:

Anchor points	Multiply y by ____	Divide x by ____	Add ____ to x	Add ____ to y
(, 0)				
(, 1)				
(, -1)				

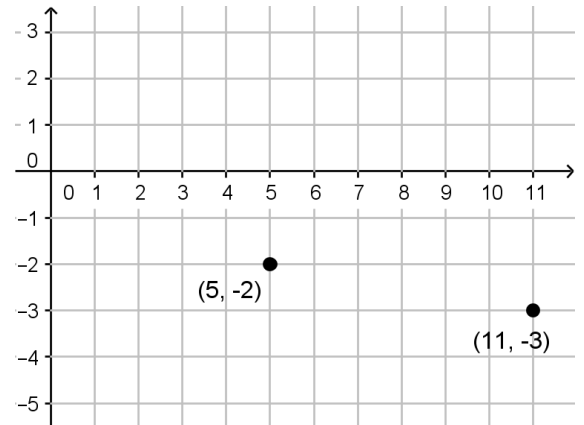


$$10. f(x) = -\log_3(3x - 6)$$

a = b = c = h = k = Domain:

Asymptote: Range:

Anchor points	Multiply y by ____	Divide x by ____	Add ____ to x	Add ____ to y
(, 0)				
(, 1)				
(, -1)				

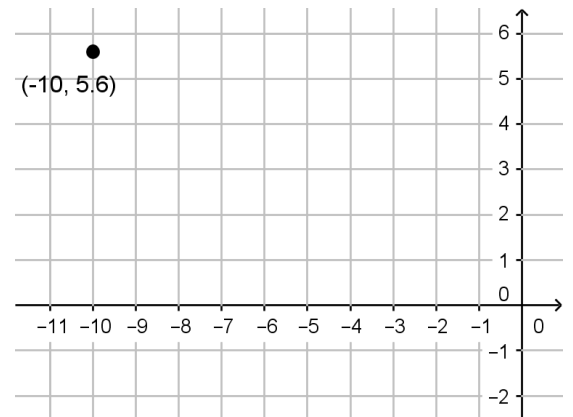


$$11. f(x) = 2 \log_6(-x) + 3$$

a = b = c = h = k = Domain:

Asymptote: Range:

Anchor points	Multiply y by ____	Divide x by ____	Add ____ to x	Add ____ to y
(, 0)				
(, 1)				
(, -1)				



$$12. f(x) = 2 \log_4(-x + 4) + 2$$

a = b = c = h = k = Domain:

Asymptote: Range:

Anchor points	Multiply y by ____	Divide x by ____	Add ____ to x	Add ____ to y
(, 0)				
(, 1)				
(, -1)				

