

Alg2: Logarithm Graphs Homework WKST

I.

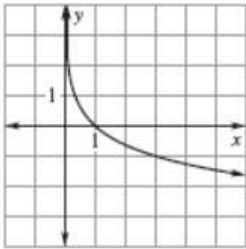
Match the function with its graph.

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

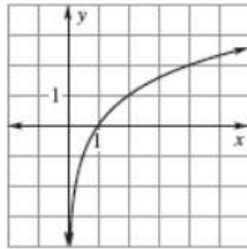
2. $f(x) = \log_5 x$

3. $f(x) = \log_{1/3} x$

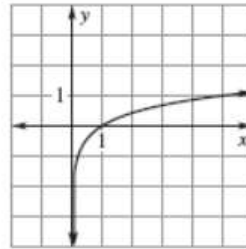
A.



B.



C.



II. Sketch each logarithmic function and state the domain and range in set notation. Include a table of values with at least 3 points.

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

2. $y = \log_5(x + 2) - 4$

3. $y = -\log_2 x + 1$

4. $y = \log(x - 2) + 4$

5. $y = \ln x - 5$

6. $y = \log_{1/2} x$

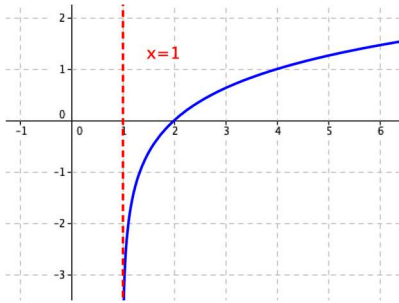
ANSWERS

I.

1. B
2. C
3. A

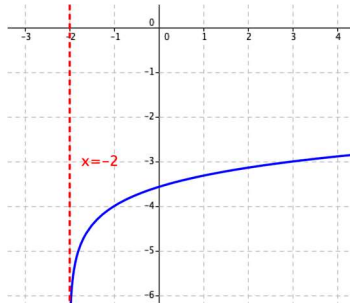
II.

1.



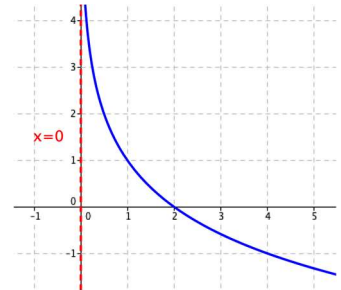
Domain: $\{x|x > 1\}$
Range: $\{y|y \in R\}$

2.



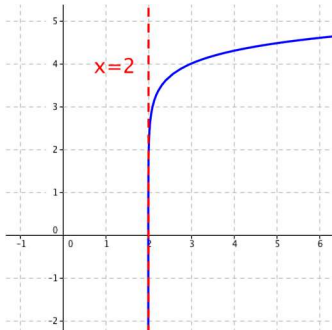
Domain: $\{x|x > -2\}$
Range: $\{y|y \in R\}$

3.



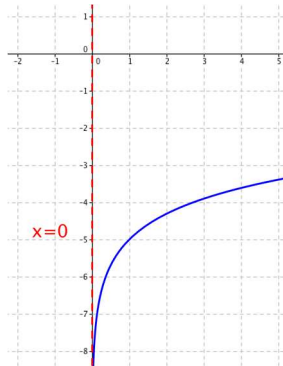
Domain: $\{x|x > 0\}$
Range: $\{y|y \in R\}$

4.



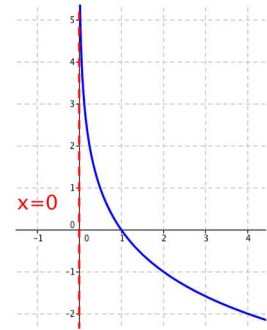
Domain: $\{x|x > 2\}$
Range: $\{y|y \in R\}$

5.



Domain: $\{x|x > 0\}$
Range: $\{y|y \in R\}$

6.



Domain: $\{x|x > 0\}$
Range: $\{y|y \in R\}$