

Graphing logarithmic functions practice (M3 2.3)

Sketch the graph of each function. Then write the equation of the asymptote and state the domain and range.

1) $y = \log_6 (x + 4)$

2) $y = \log_5 (x + 5) - 5$

3) $y = \log_4 (x - 1) + 1$

4) $y = \log_6 (x - 1) + 3$

5) $y = \log_3 (x - 1) - 2$

6) $y = \log_3 (x + 4) + 4$

7) $y = \log_3 (x + 3) + 5$

8) $y = \log_4 (x + 2) - 2$

$$9) y = \log_3 (x + 5)$$

$$10) y = \log_6 (x - 1) - 3$$

$$11) y = \log_4 (x + 6) - 4$$

$$12) y = \log_2 (x - 1) - 4$$

$$13) y = \log_5 (x - 3) - 4$$

$$14) y = \log_4 (x - 1)$$

$$15) y = \log_{\frac{1}{4}} (x - 1) + 2$$

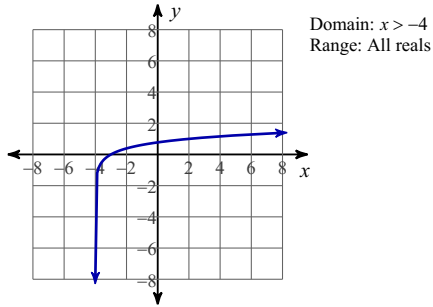
$$16) y = \log_{\frac{1}{3}} (x - 2) - 2$$

$$17) y = \log_{\frac{1}{4}} (x - 1) + 1$$

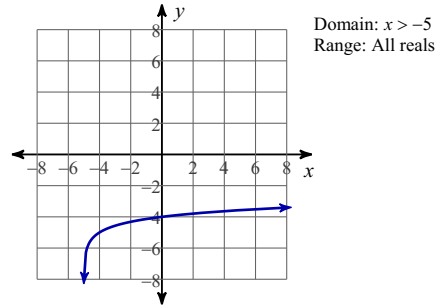
$$18) y = \log_{\frac{1}{3}} (x + 5) + 4$$

Answers to Graphing logarithmic functions practice (M3 2.3)

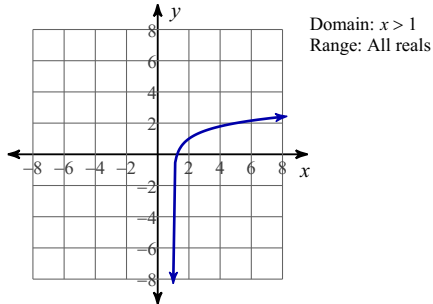
1)



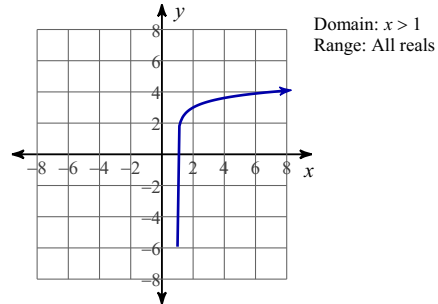
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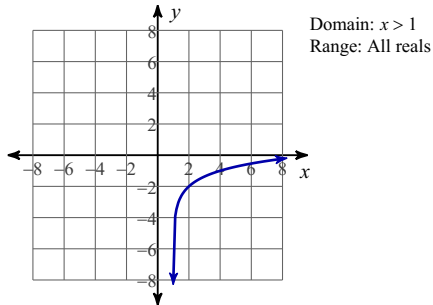
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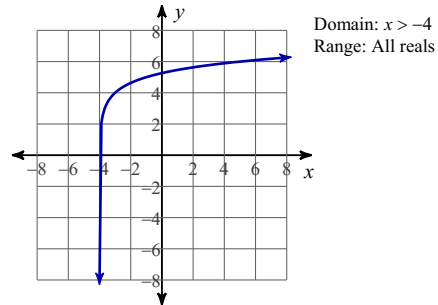
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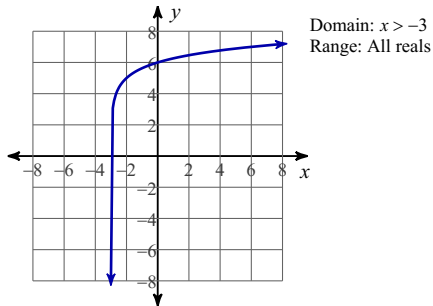
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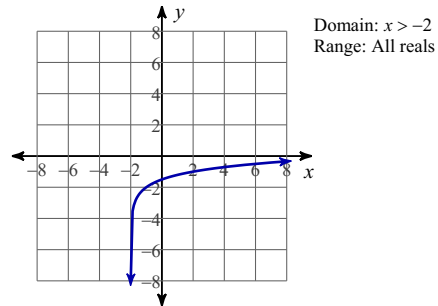
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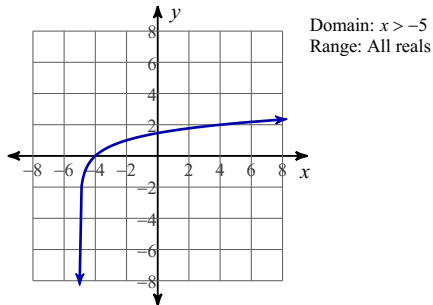
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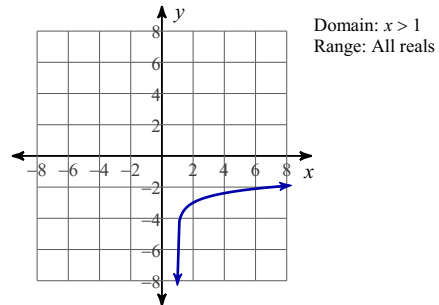
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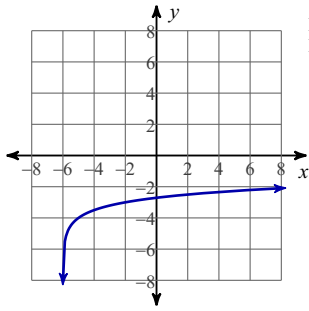
9)



10)

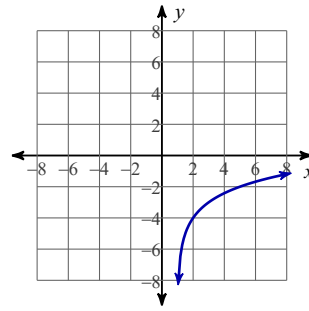


11)



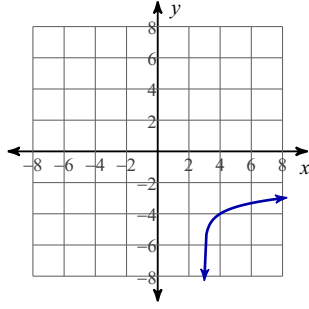
Domain: $x > -6$
Range: All reals

12)



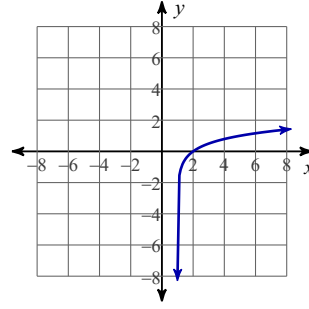
Domain: $x > 1$
Range: All reals

13)



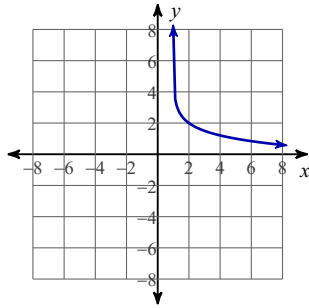
Domain: $x > 3$
Range: All reals

14)



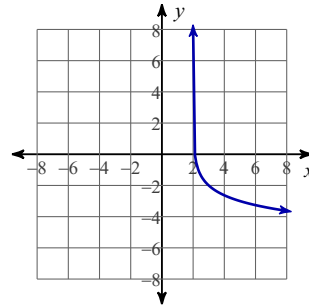
Domain: $x > 1$
Range: All reals

15)



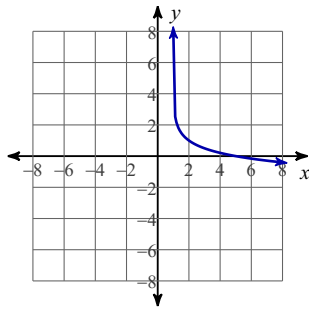
Domain: $x > 1$
Range: All reals

16)



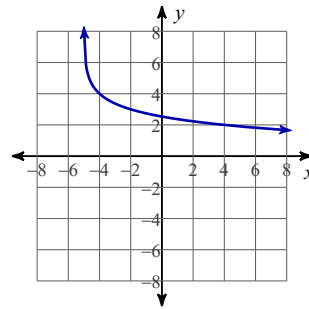
Domain: $x > 2$
Range: All reals

17)



Domain: $x > 1$
Range: All reals

18)



Domain: $x > -5$
Range: All reals