Quiz 6

Math 3C: Precalculus

November 14, 2019

When you finish, please remain seated until class is dismissed

Name: Solutions PID: _____

Problem 1 (5 points). Solve the equation $2 \cdot 5^{x+1} = 4$ for x.

$$2 \cdot 5^{x+1} = 4$$

$$5^{x+1} = 2$$

$$\log_5(5^{x+1}) = \log_5(2)$$

$$x + 1 = \log_5(2)$$

$$x = \log_5(2) - 1$$

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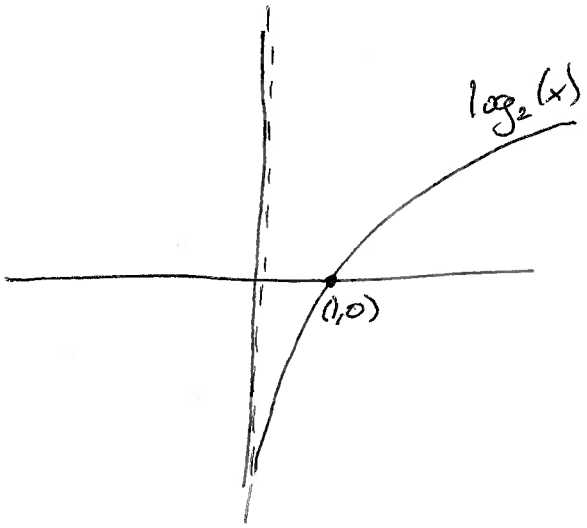
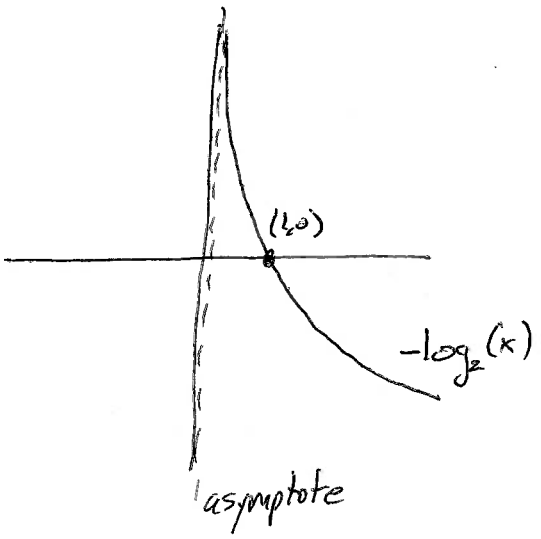
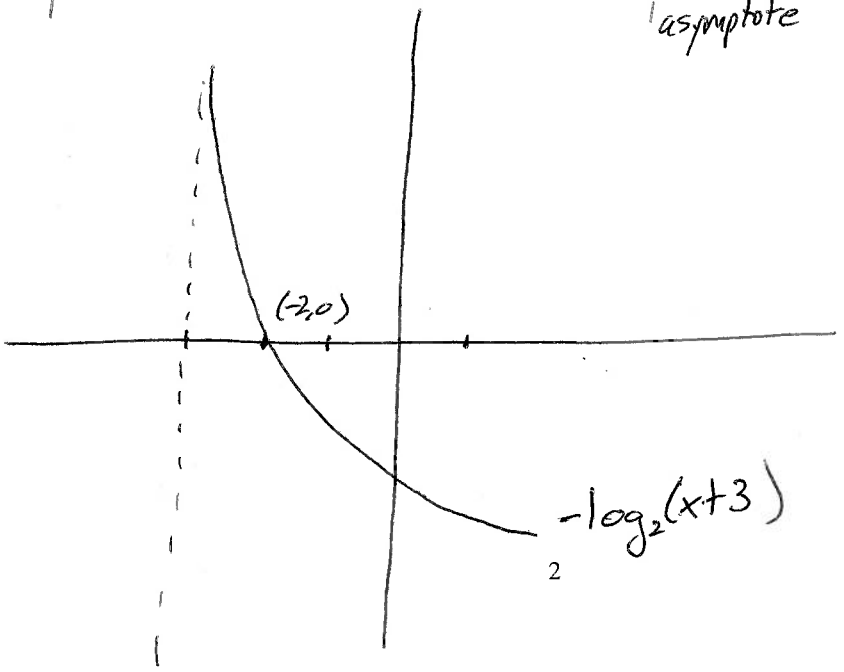
Problem 2 (5 points). Sketch the graph of $a(x) = -\log_2(x+3)$. Label any asymptotes and the *horizontal* intercept (you do not need to label the vertical intercept).

$-\log_2(x+3)$ is like $\log_2(x)$ but
- vertically reflected and
- shifted left by 3 units







← Final Answer