

1. Algebraically determine the inverse of $f(x) = 3^x - 5$.

2. Algebraically determine the inverse of $f(x) = 10^{x+5} - 8$

3. Algebraically determine the inverse of $f(x) = \log_6 x + 4$

4. Algebraically determine the inverse of $f(x) = \log_7(x+1) - 3$

5. Solve.

a. $5 \cdot 4^{x-8} + 4 = 29$

b. $2 \log_2(3x+1) - 7 = 1$

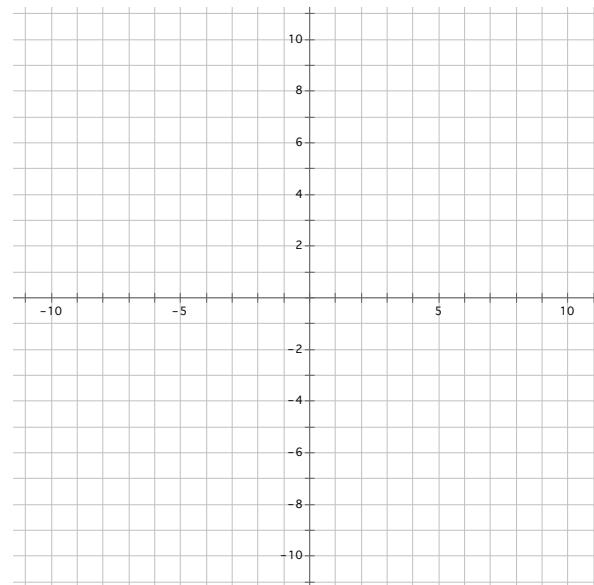
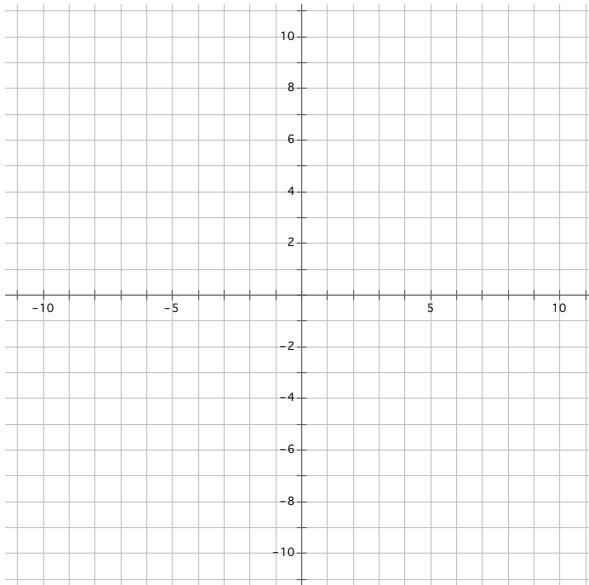
c. $\log_2(\log_3 x) = 3$

d. $2^{3x+1} - 15 = 25$

6. Sketch each equation.

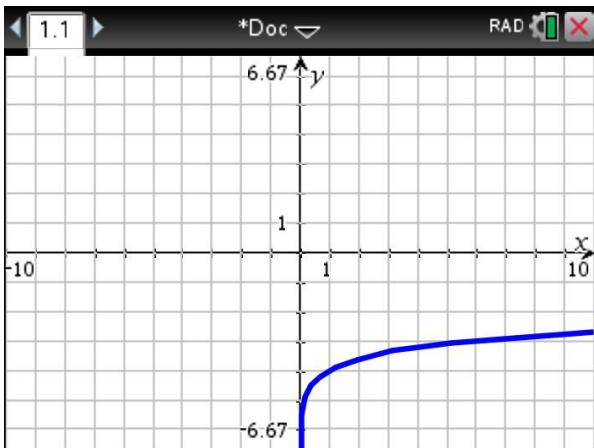
a. $f(x) = \log_3(x+4) - 5$

b. $y = \log_{\frac{1}{4}}(x+1) + 3$

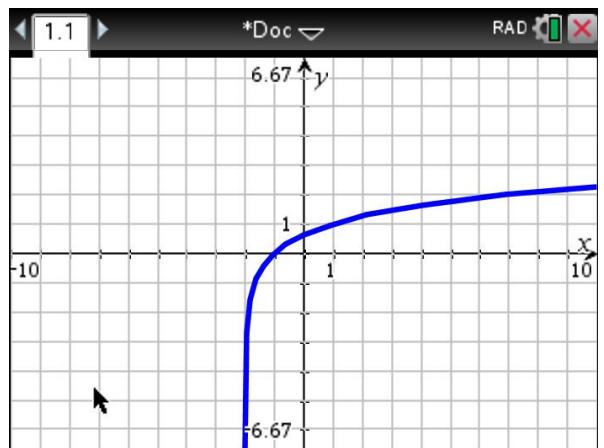


7. Determine an equation for each graph.

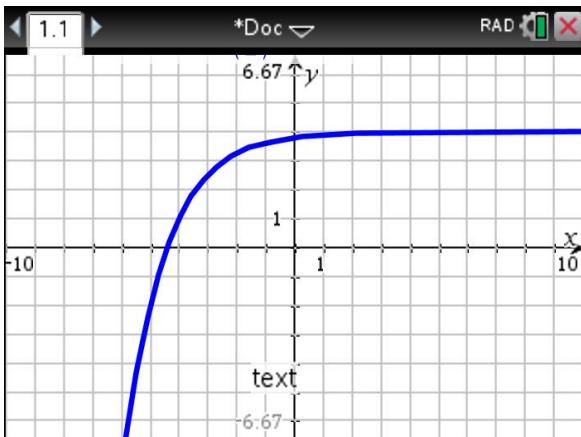
a.



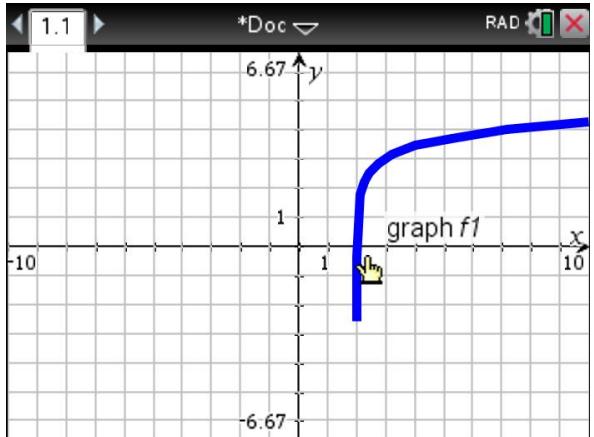
b.



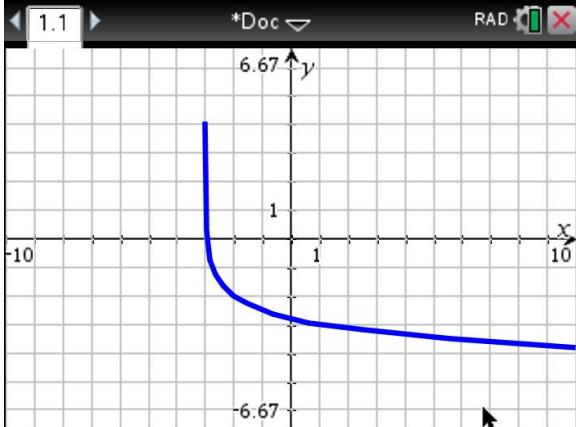
c.



d.



e.



f.

