

RIDDLE

PRE-CALCULUS

GRAPHING EXPONENTIAL AND LOGARITHMIC FUNCTIONS

Graph the following using a parent function and graph shifting techniques:

1. $y = 3^x$

6. $y = -3^{x+2} - 1$

2. $y = -3^x$

7. $y = \log_3 x$

3. $y = 3^{-x}$

8. $y = -\log_3 x$

4. $y = 3^x + 3$

9. $y = \log_3(x + 3) - 3$

5. $y = 3^{x-3}$

10. $y = -2\log_3 x$