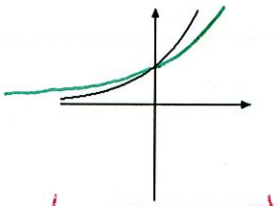
[1 PTS] The graph of $f(x) = 4^x$ is shown below.

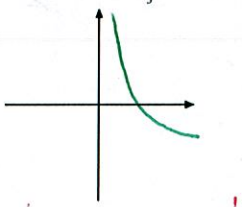
On the same grid, sketch the graph of $g(x) = 3^x$.



[2 PTS] Sketch the following graphs.

$f(x) = \left(\frac{5}{2}\right)^x$

$f(x) = \log_{\frac{2}{3}} x$



[7 PTS] Fill in the blanks. Write **DNE** if the value is undefined.

$\log 10{,}000{,}000 =$ 7

$\log_2 \frac{1}{8} =$ -3

$7^{\log_7(-1)} =$ DNE

$\log_{16} 2 =$ $\frac{1}{4}$

$\log_5 5^0 =$ 0

$\log_9 \frac{1}{3} =$ $-\frac{1}{2}$

$\log_3 81 =$ 4