1 of 2. The straight line asymptotic approximation and smooth curve for the Bode magnitude plot of a transfer function is given. The horizontal axis is the radian frequency. What is the transfer function?

\[ T(s) = 100 \frac{s/200}{1 + s/200} \frac{1 + s/200}{1 + s/4000} \]
Sketch the straight line approximation and smooth curve Bode magnitude plots for the transfer function

\[ T(s) = 200 \frac{s}{4000 + 1} \frac{\left(\frac{s}{400}\right)^2 + 0.4 \left(\frac{s}{400}\right) + 1}{s^2 + 0.4 \left(\frac{s}{400}\right) + 1} \]

Label the axes in such a way as to make best use of the 5 log cycle graph.