

Analyze qualitatively the operation of the circuit below when it is fed by a sinusoidal signal, $V_{in} = V_{in}^0 \sin(\omega t)$. How is the output amplitude related to the input amplitude in the limits of $\omega \rightarrow 0$ and $\omega \rightarrow \infty$? What choices regarding components should be made for this circuit to fulfill a useful role?

