

P 3-3-5

$$V_0 = \frac{100}{100 + 2R} V_s \rightarrow R = 50 \left(\frac{V_s}{V_0} - 1 \right)$$

if $V_s = 20^v$ & $V_0 > 9^v$ ~~&~~ $R < 61.1 \Omega$

if $V_s = 28^v$ & $V_0 < 13^v$ ~~&~~ $R > 57.7 \Omega$

e.g.
 $\Rightarrow R = 60 \Omega$