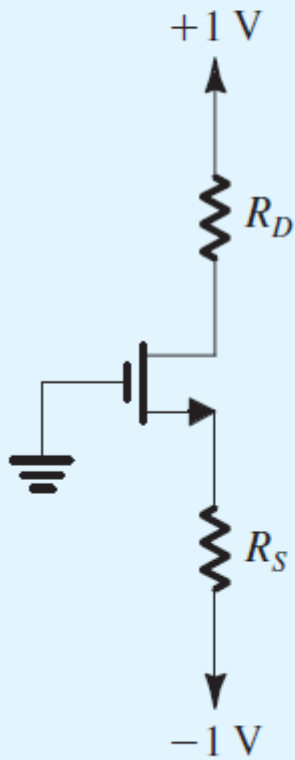


**D 5.44** Design the circuit of Fig. P5.44 to establish a drain current of 0.1 mA and a drain voltage of +0.3 V. The MOSFET has  $V_t = 0.5$  V,  $\mu_n C_{ox} = 400 \mu\text{A}/\text{V}^2$ ,  $L = 0.4 \mu\text{m}$ , and  $W = 5 \mu\text{m}$ . Specify the required values for  $R_S$  and  $R_D$ .



**Figure P5.44**