4.4 Find the values of I and V in the circuits shown in Fig. E4.4. Assuming the woods are ideal.

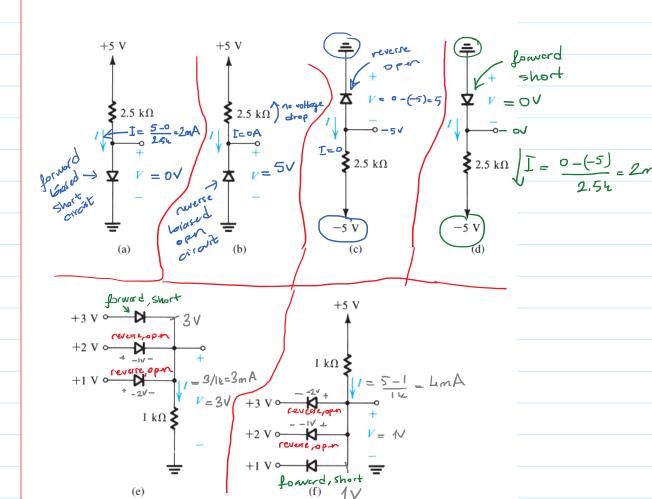


Figure E4.4

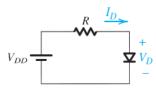
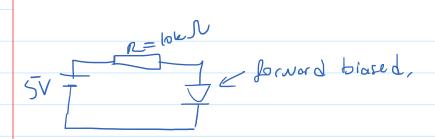


Figure 4.10

For the circuit in Fig. 4.10, find I_D and V_D for the case $V_{DD}=5$ V and R=10 k Ω . Assume that the diode has the constant-voltage-drop model with $V_D=0.7$ V.

Ans. 0.43 mA, 0.7 V



$$5\sqrt{\frac{1}{10^{10}}} = \frac{5-0.7}{10^{10}} = 0.43 \text{ mA}$$