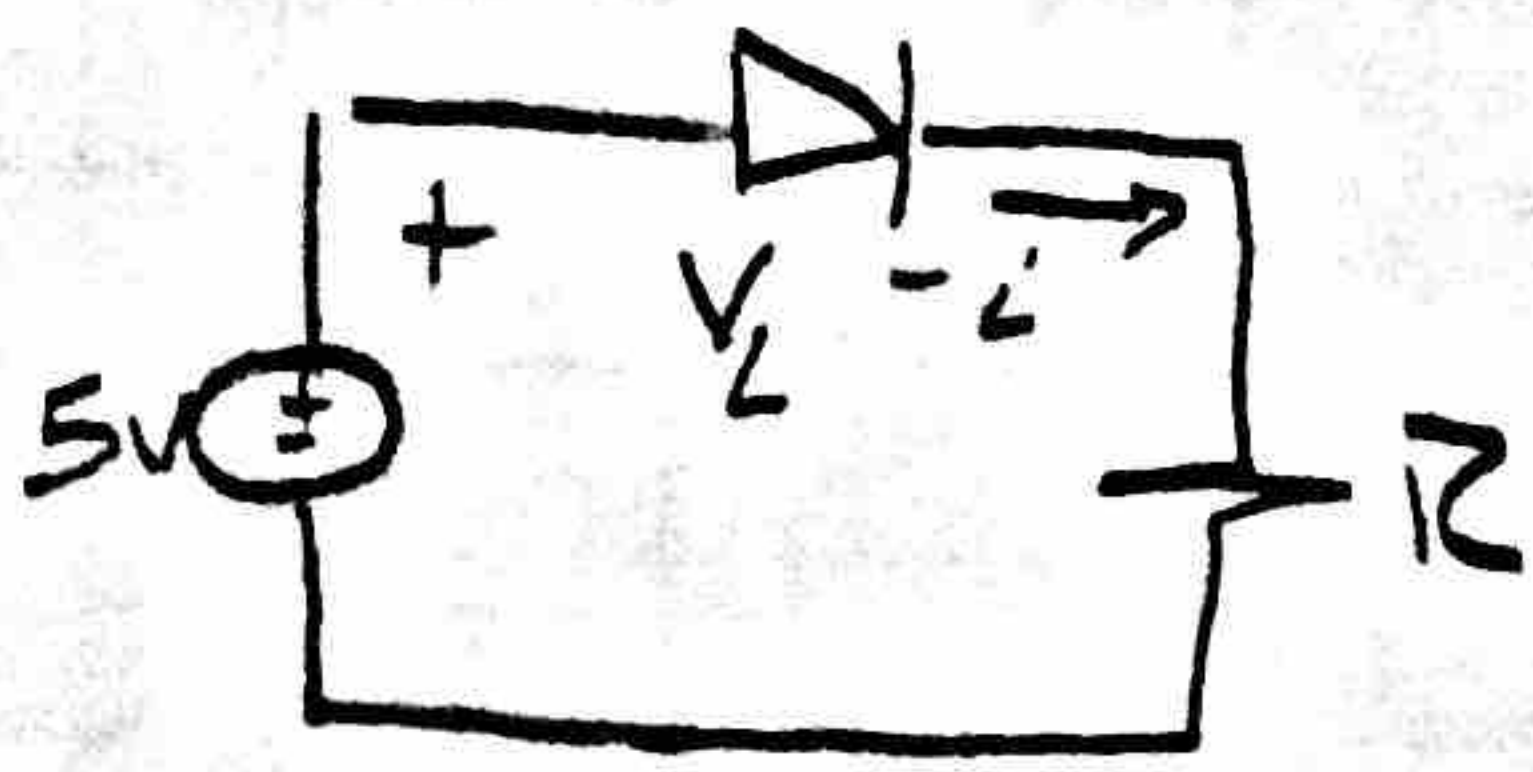


Problem 1

a.)

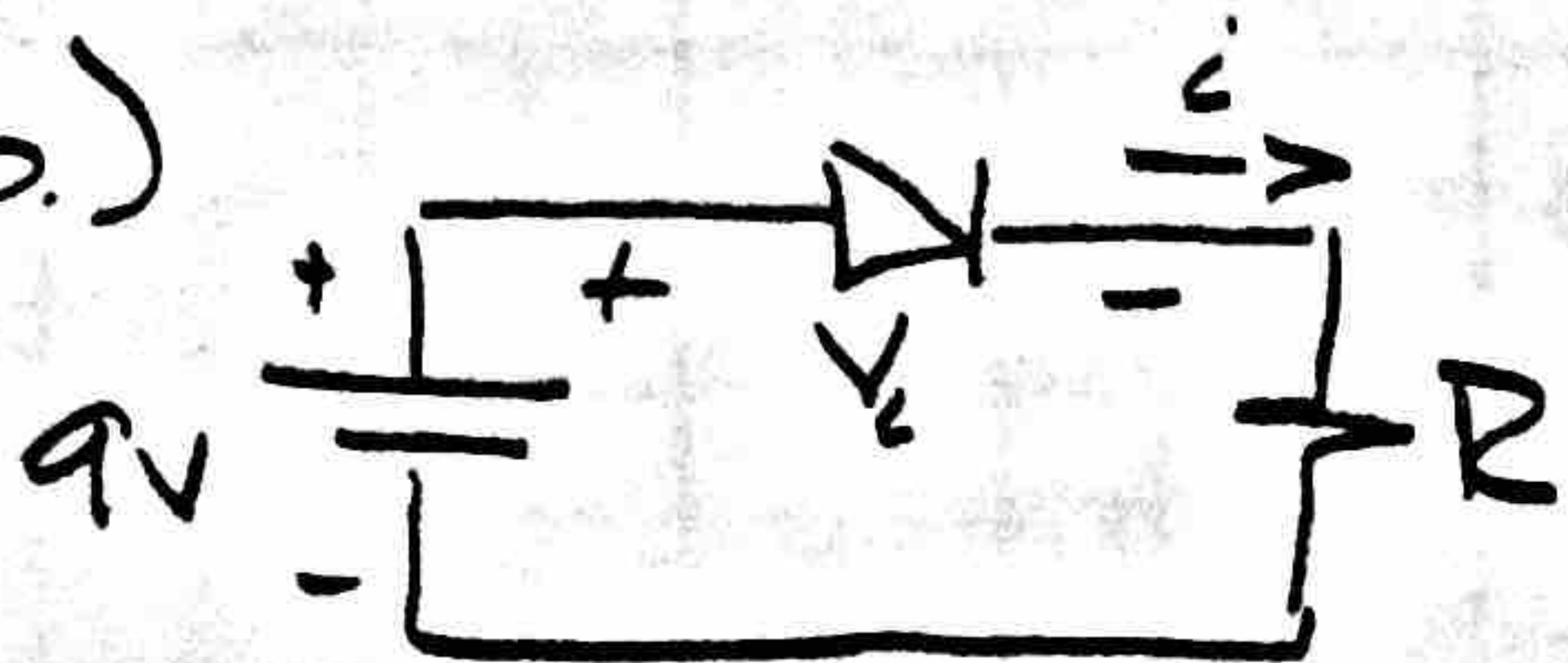


$$i = 25 \text{ mA}$$

$$V = iR$$

$$R = \frac{V_S - V_L}{i} = \frac{5\text{V} - 3.2\text{V}}{0.025\text{A}} = 72\Omega$$

b.)



$$i = 20 \text{ mA}$$

$$V = iR$$

$$R = \frac{V_S - V_L}{i} = 335\Omega$$

c.) For part a.) I would use a 100Ω resistor, and for part b.) I would use a 330Ω resistor in series with a 10Ω resistor.