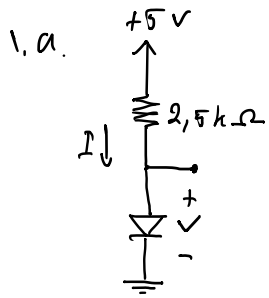


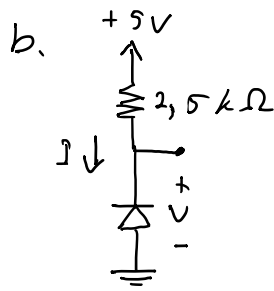
kuis 1



$$V = 0V$$

$$I = \frac{5V}{2.5k\Omega}$$

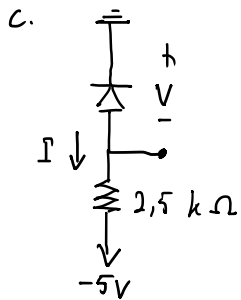
$$I = 2mA$$



$$I = 0A$$

$$V = -(2.5k\Omega)I + 5V$$

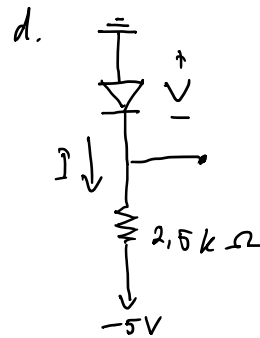
$$V = 5V$$



$$I = 0A$$

$$V = -(-5V) + (2.5k\Omega) \cdot I$$

$$V = 5V$$

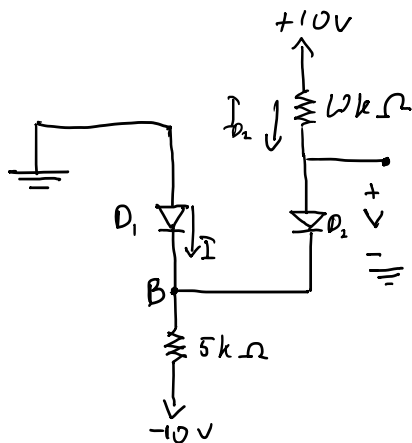


$$V = 0$$

$$I = \frac{0 - (-5)}{2.5k\Omega}$$

$$= 2mA$$

2. a.



$$V_B = 0$$

$$V = 0$$

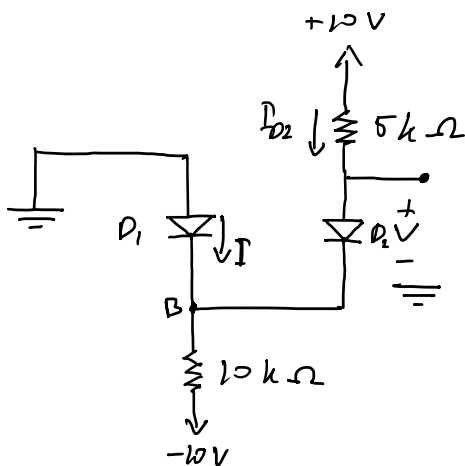
$$I_{D2} = \frac{10 - 0}{10k\Omega} = 1mA$$

$$I + I_{D2} = \frac{0 - (-10)}{5k\Omega}$$

$$I + 1mA = 2mA$$

$$I = 1mA$$

b.



$$V_B = 0$$

$$V = 0$$

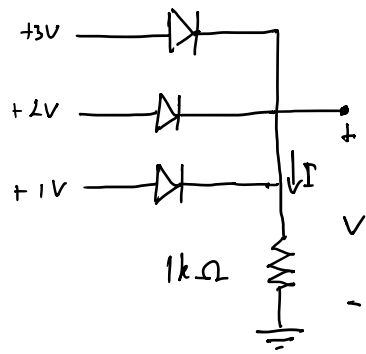
$$I_{D2} = \frac{10 - 0}{5k\Omega} = 2mA$$

$$I + I_{D2} = \frac{0 - (-10)}{10k\Omega}$$

$$I + 2mA = 1mA$$

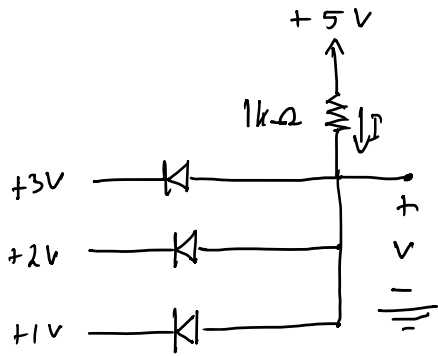
$$I = -1mA$$

3. a.



Gerbang logika OR

b.



Gerbang logika AND