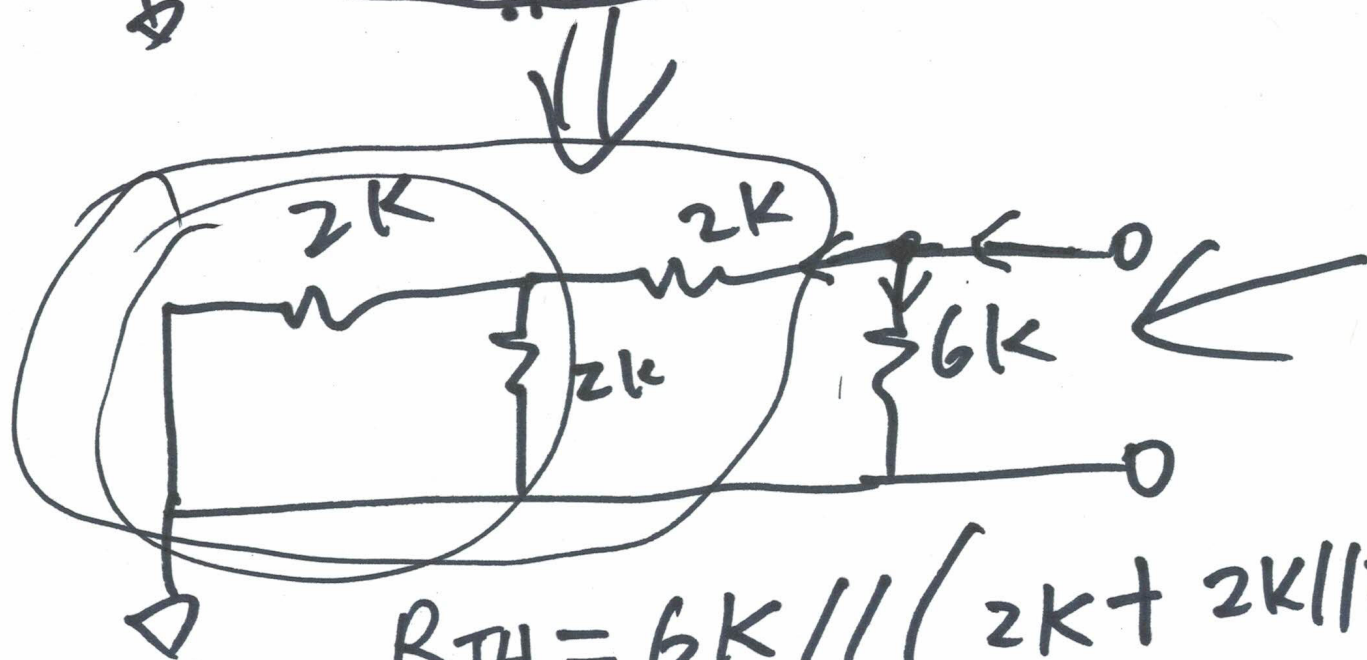
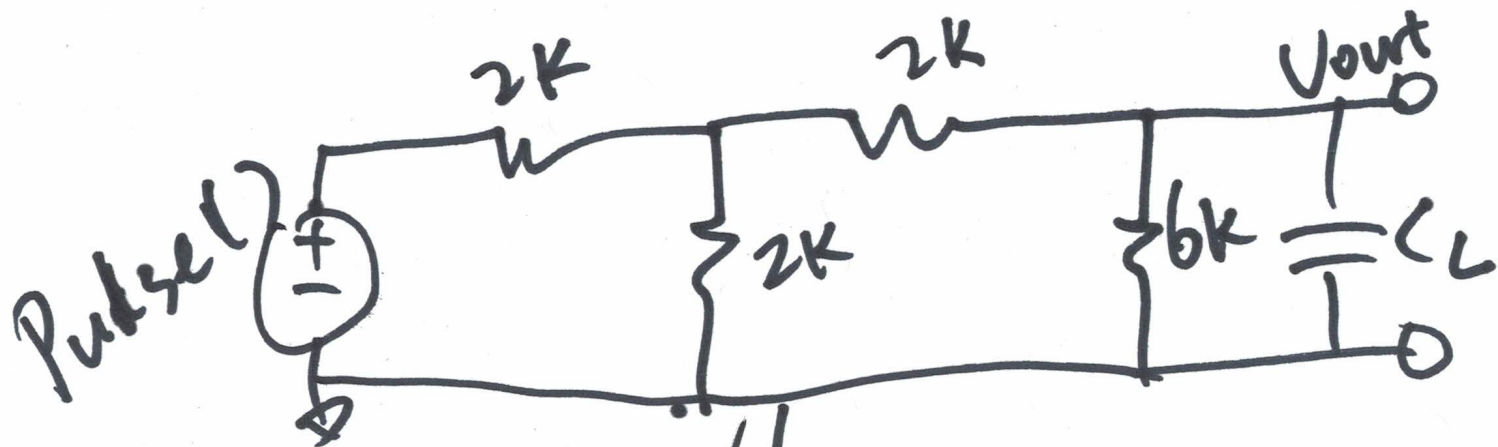
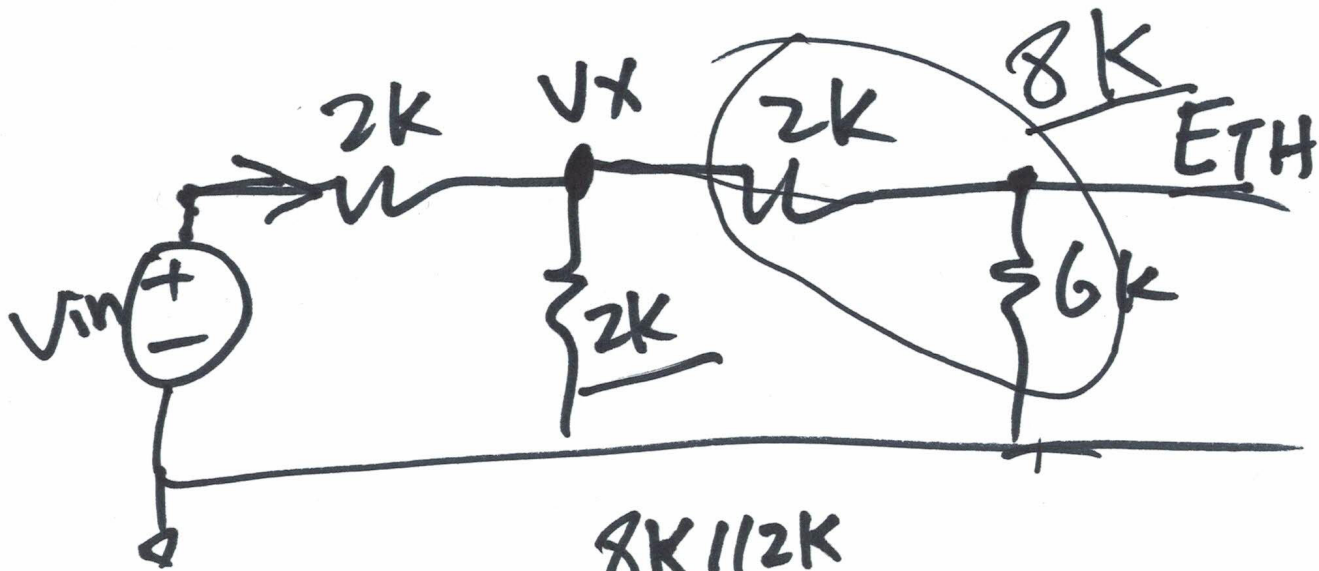


①



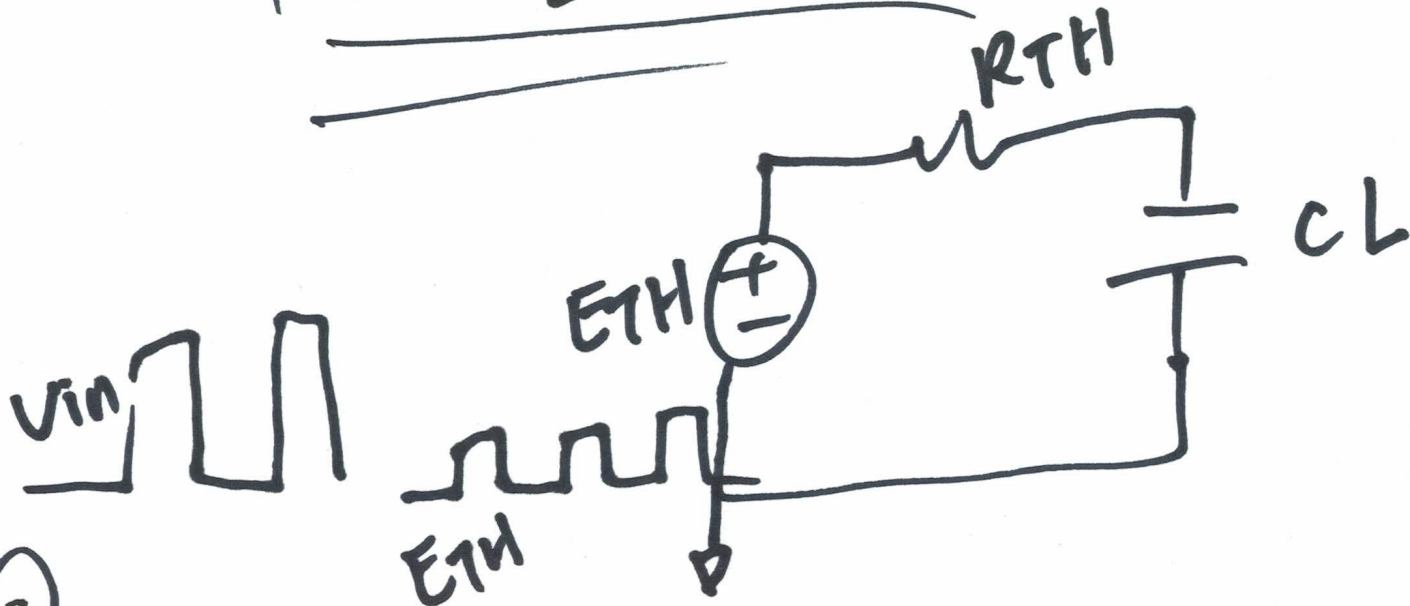
$$R_{TH} = 6k \parallel (2k + 2k \parallel 2k)$$

②

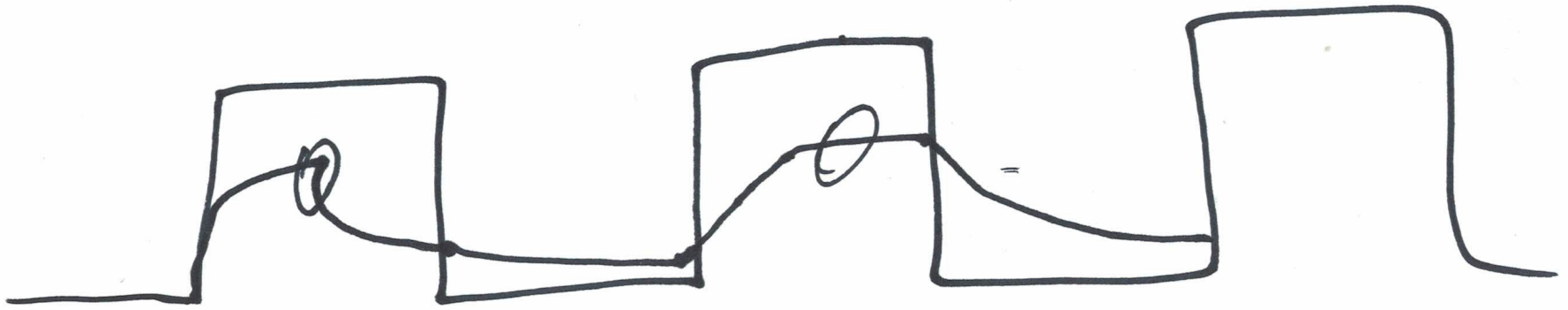


$$v_x = v_{in} \cdot \frac{8k // 2k}{2k + (8k // 2k)}$$

$$E_{TH} = \frac{6k}{2k + 6k} \cdot v_x$$



(3)



$$\uparrow t_d = 0.7 RC \quad \uparrow \uparrow$$