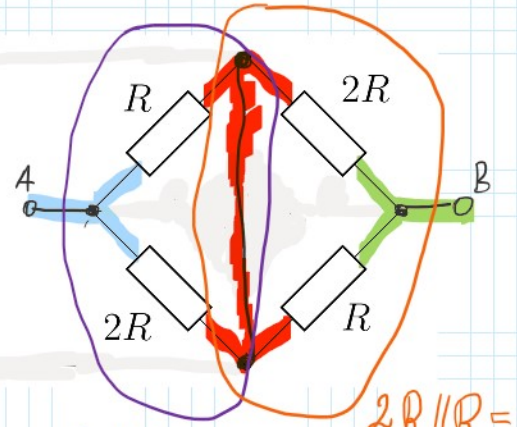
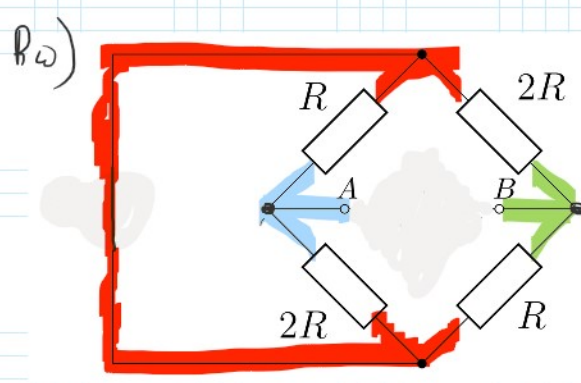


$$U_1 - E_T - U_2 = 0$$

$$E_T = U_1 - U_2 = \left( \frac{2}{3} - \frac{1}{3} \right) E = \frac{E}{3}$$

$$U_1 = E \cdot \frac{2R}{2R + R} = \frac{2}{3} E$$

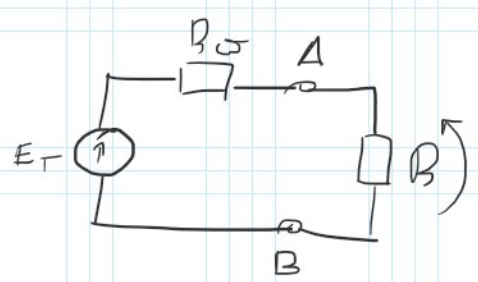
$$U_2 = E \cdot \frac{R}{R + 2R} = \frac{1}{3} E$$



$$R \parallel 2R = \frac{2}{3} R$$

$$2R \parallel R = \frac{2}{3} R$$

$$R_B = \frac{2}{3} R + \frac{2}{3} R = \frac{4}{3} R$$



$$U = E_T \cdot \frac{R}{R + R_B} = \frac{E}{3} \cdot \frac{R}{R + \frac{4}{3} R} = \frac{E}{3} \cdot \frac{1}{\frac{7}{3}} = \frac{E}{7}$$