

$$V = 10 \text{ V} , \quad I_1 = 50 \text{ mA}$$

$$I_2 = 30 \text{ mA}$$

~~40 A~~

$$R = \frac{V}{I} = \frac{10 \times 10^3}{50}$$

$$R = 200 \, \Omega$$

$$V = 200 \times 0.03 = 6 \text{ V}$$

change - 4V

$$R = \cancel{300} 3300 \pm 5\%$$

$$R_{\min} = 3135 \Omega, R_{\max} = 3465 \Omega$$

$$V = 12 \text{ V}$$

$$I_{\min} = \frac{V}{R_{\max}} = \frac{12}{3465} = 3.5 \text{ mA}$$

$$I_{\max} = \frac{V}{R_{\min}} = \frac{12}{3135} = 3.8 \text{ mA}$$

$$V = 12 \text{ V}, R = 10 \Omega$$

$$P = V^2/R = 14.4 \text{ W}$$

$$W = Pt = 14.4 \times 0.03 = 0.48 \text{ Wh}$$

b) will discuss in ~~at~~ class