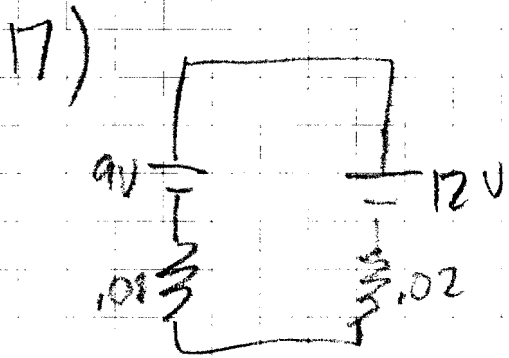


$$a) R_{\text{eff}} = 1 + \frac{1}{\frac{1}{2} + \frac{1}{4} + \frac{1}{6}} = \frac{23}{11} \quad I_{\text{tot}} = \frac{6}{R_{\text{eff}}} = \frac{66}{23} \text{ amps}$$

$$b) V_{AB} = 6 - 1 \cdot I_{\text{tot}} \quad \frac{V_{AB}}{6} = I_{6\Omega} = \frac{6 - \frac{66}{23}}{6} = 1 - \frac{11}{23} = \frac{12}{23}$$



$$12 - 9 + 0.03I - 0.02I = 0$$

$$3 = 0.01I \quad I = 300 \text{ amp}$$

(and against the battery)