

a) $I = 15.0 \text{ A}$
 $t = 1 \text{ min} = 60 \text{ sec}$

$$I = q/t \quad \text{so} \quad 15.0 \text{ A} = \frac{q}{60 \text{ sec}}$$

$$q = 900 \text{ C}$$

b) $q = 900 \cancel{\text{C}} \cdot \frac{1 \text{ electron}}{1.6 \times 10^{-19} \cancel{\text{C}}}$

$$q = 5.6 \times 10^{21} \text{ e}^{-}\text{'s}$$