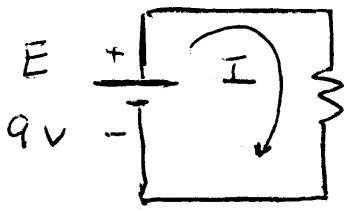
2012/2/1

Ex 4.1



OHM's LAW

$I = \frac{E}{R}$

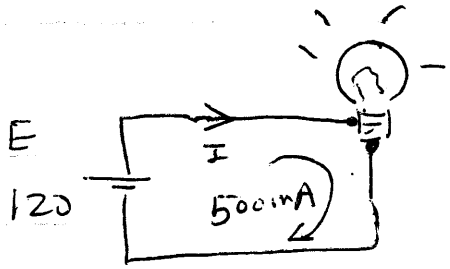
$= \frac{9\,V}{2.2\,\Omega}$

$I = \frac{9}{2.2} = 4.1\ \text{Amp}$ ✓

$= 4.09$ Amp OK

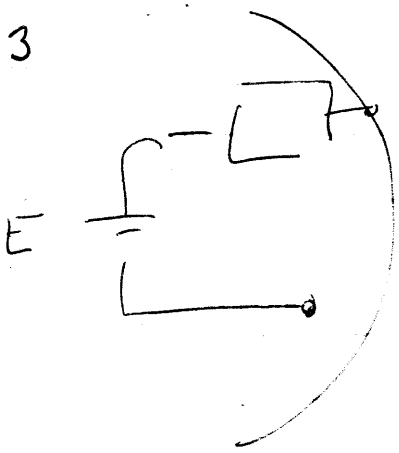
4.0909....
2.2) 90
88
200
198
200
198
20

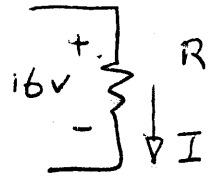
Ex 4.2



MAP

Ex 4.3





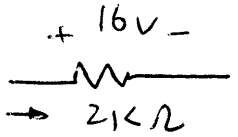
$I = \frac{E}{R}$ ✓

$I = \frac{16\,V}{2K\Omega}$

$= \frac{16\ (V)}{2\times10^{3}\,(\Omega)}$ Amp

$= \frac{16\times10^{-3}}{2\times10^{3}\times10^{-3}} = 0.008\,\text{Amp}$

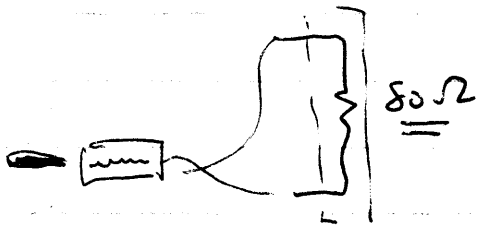
$= \frac{16\times10^{-3}}{2\times1} = \frac{16}{2}\times10^{-3} = 8\,\text{mA}$

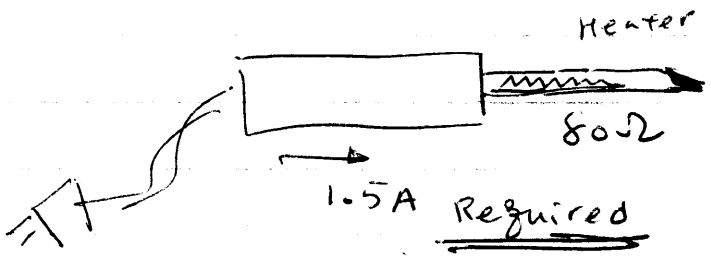


$10^{3}\times10^{-3} = 10^{3-3} = 10^{0}$

$= 1$

Ex 4-4.





E = ____ ?

Design

$I_{\checkmark} = \frac{E}{R}$?✓

Right (Known Quantities)

DC ✓

AC

$I \not\rightarrow \frac{E}{R}$

$\frac{I}{1} \not\rightarrow \frac{E}{R}$

$I \cdot R = E \cdot 1 = E$

$E = I \cdot R = 1.5_A \times 80\Omega$

$= 120$ volts ✱