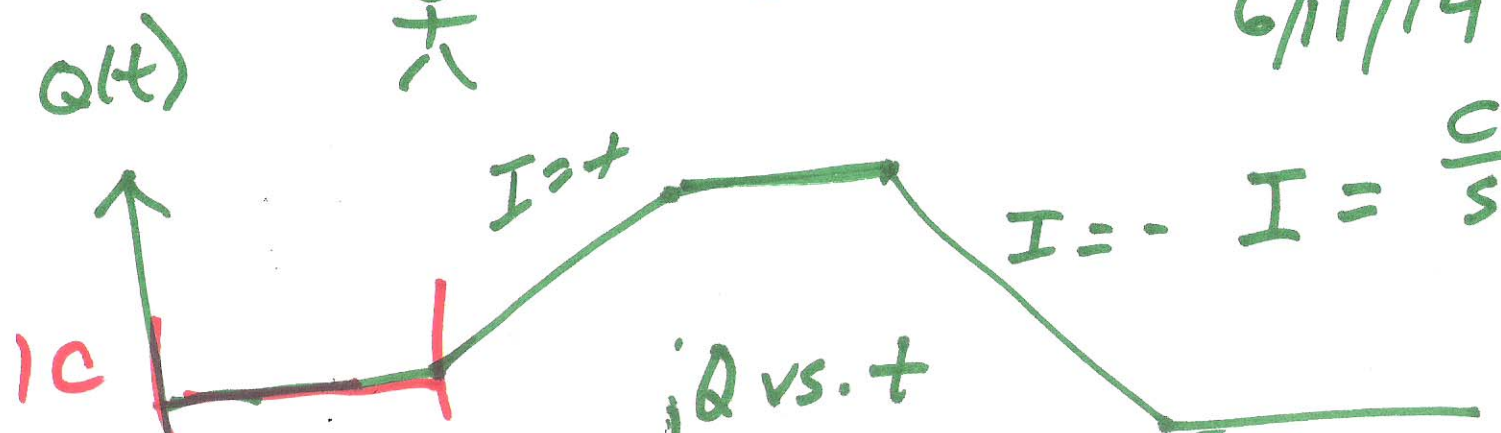


Lec 20

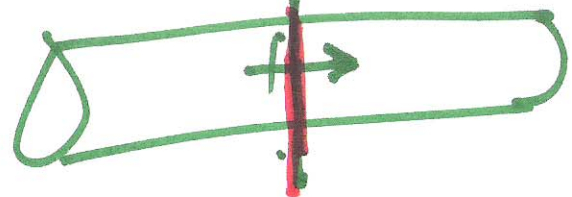
2200

CIRCUITS I

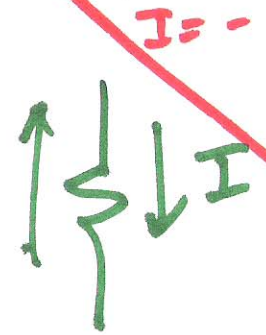
6/11/14



$$I = \frac{C}{s}$$



$$I = \frac{dq}{dt}$$



1)

$V = IR^{\infty}$

$I \rightarrow 0$
 $R \rightarrow \infty$



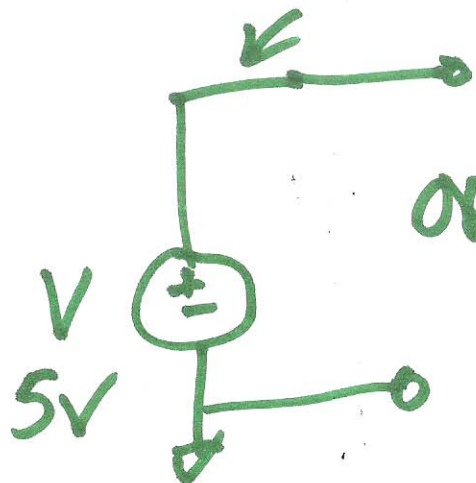
Hose bib

Water pressure x Amount of water
 Power

$120 \times \text{CURRENT USED}$
 POWER

$E = \text{Joules}$

WATTS = Joules



open load $R = \infty$

4-lights KW.HR = 410

60-WATTS

240 WATTS \approx 250 WATTS

4-Hours Use 1KW

\$ 30 / NIGHT

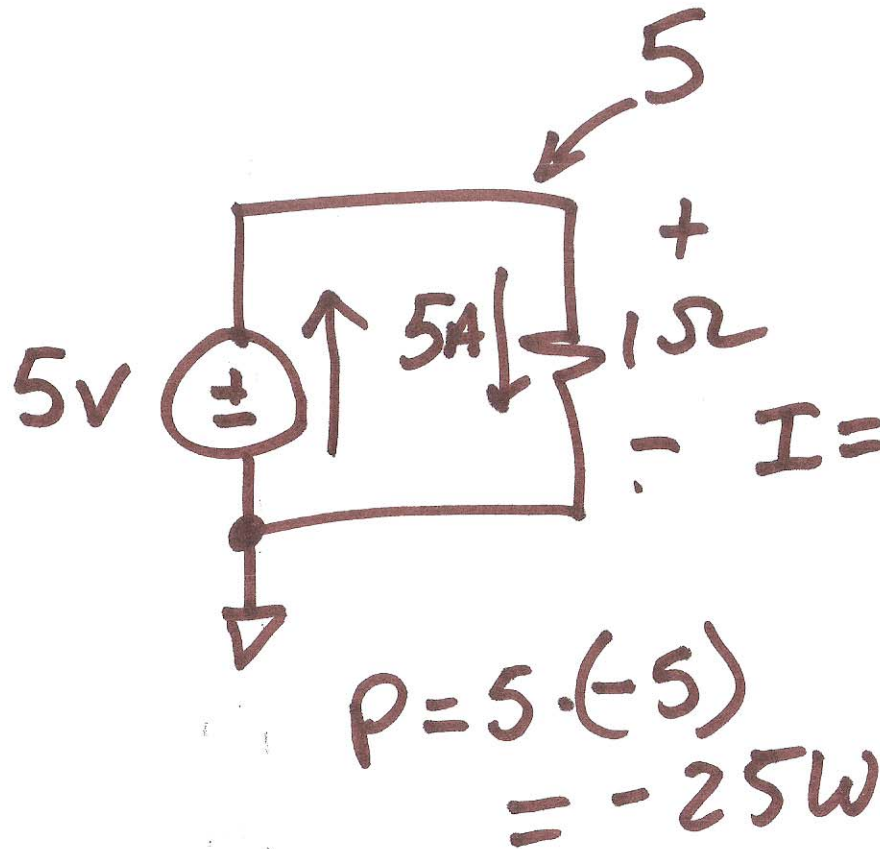
\$ 9.00

2)

$$240V \cdot 30A = 7200W = 7.2kW$$

$$\text{power} = V \cdot I$$

$$\$10 / kW \cdot H$$



\$72

$$P = V \cdot I = 5V \cdot 5A = 25W$$

$$P = \frac{V^2}{R} = \frac{5^2}{1} = 25W$$

$$P = I^2 R = (5A)^2 \cdot 1 = 25W$$