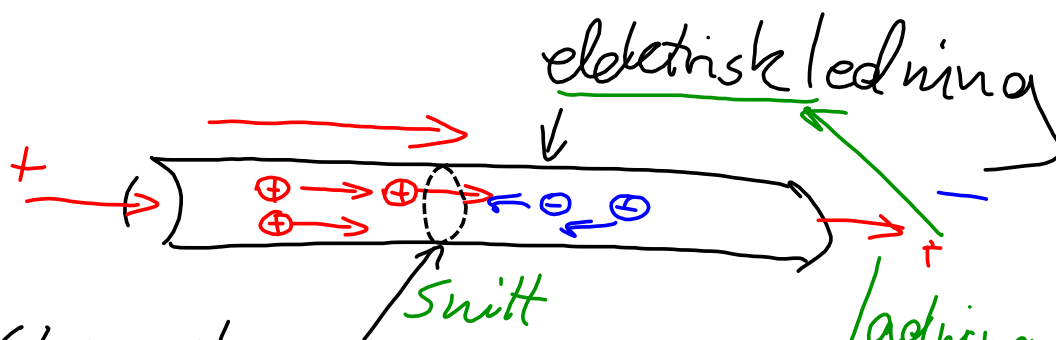


Strøm: Lading i bevegelse



Strømretning er egentlig som den retning + lading beveger seg

lading beveger seg rett i ledningen (laget av metall)

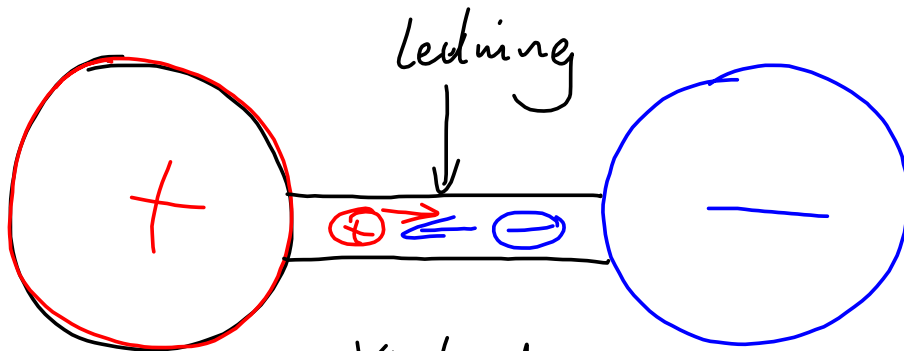
Strøm: Størrelsen:

Hvor mye lading beveger seg over snittet per sekund

Symbol for strøm: I (eller i)

$$I = \frac{Q}{t} \Rightarrow [A] = \frac{[C]}{[s]}$$

Elektrisk spenning



Vi bruker motstand



(for å begrense strømmen)

Symbol for spenning: U (eller u)

i USA \rightarrow V (eller v)

Enhetsen for spenning:

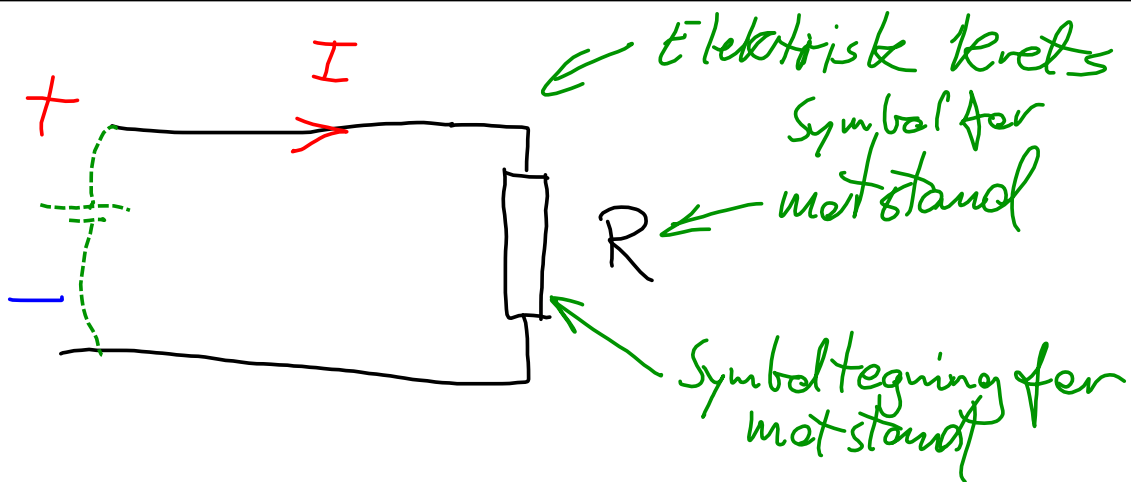
$[Volt] \Rightarrow [V]$

arbeid

$$U = \frac{W}{q}$$

lading

$[J]$
 $[C]$



i VSA : 

(Spole: )

R

Benevnelse: [Ω] → [ohm]

Ohm
(gode bokstaver)

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

← Ohm's lov

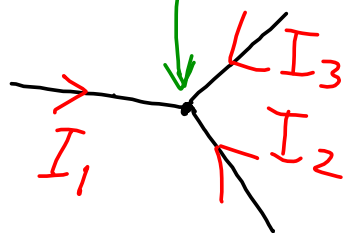
Ek: $U = 10,0 \text{ [V]}$ $I = 5,0 \text{ [A]}$

$$R = \frac{10,0 \text{ [V]}}{5,0 \text{ [A]}} = 2,0 \text{ [Ω]}$$

Kirchoff's strømlov

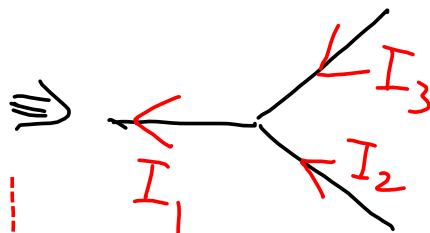
Summen av alle strømmer inn til et punkt er like null.

Ex



$$I_1 + I_2 + I_3 = 0$$

$$I_2 + I_3 = -I_1$$

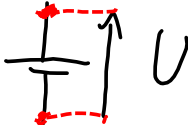


$$-I_1 + I_3 + I_2 = 0$$

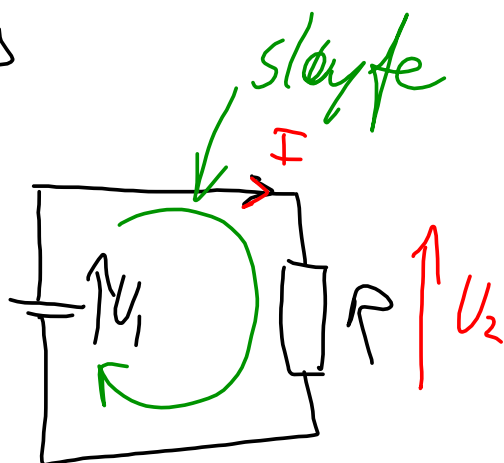
$$I_3 + I_2 = I_1$$

Kircheff's spenningslov

Summen av alle spenninger i en sløyfe er lik null

Symboltegnning for en spenningskilde (like spenning): $\text{---} \overset{+}{\parallel} \text{---} U$ 

Eks



$$U_2 = I \cdot R$$

$$U_1 + (-U_2) = 0$$

$$U_1 = U_2$$

