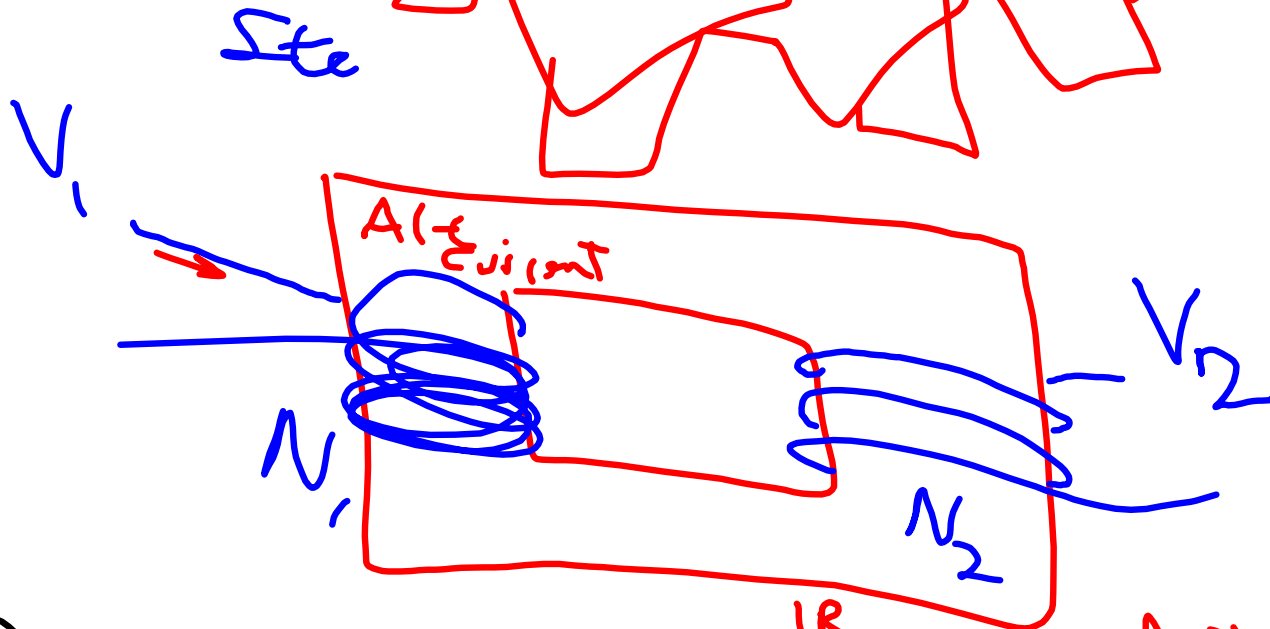


B increasing
 → counter

B decreasing
 → clockwise

14

TRANSFORMERS



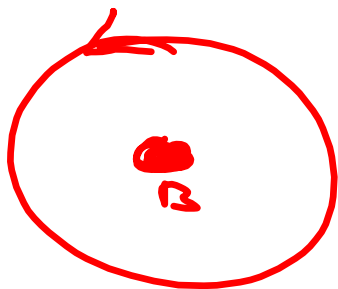
$$P = IV$$

$$V = IR$$

$$P = I^2 R$$

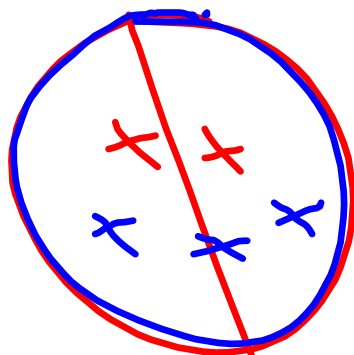
$$\frac{V_1}{N_1} = \frac{V_2}{N_2} = \frac{IR}{N_2} = \epsilon \dots N \frac{\Delta \Phi}{\Delta t} \frac{B \cdot A}{l}$$

9



B decreasing

12



r_0

$\rightarrow .06 \text{ m}$

$$A = \pi r^2$$

$$A = \pi \left(\frac{.12}{2}\right)^2$$

$$\Sigma = -N \frac{\Delta \Phi}{\Delta t}$$

$$IR = - \frac{\Delta B \cdot A}{\Delta t}$$

$$\Sigma = B \frac{\Delta A}{\Delta t}$$

$$\Sigma = \frac{.75 \text{ T}}{.5 \text{ sec}} \pi \left(\frac{.06^2}{2} - .2^2 \right)$$