



6

6.1

6.2

6.3

*6.4

6



1.

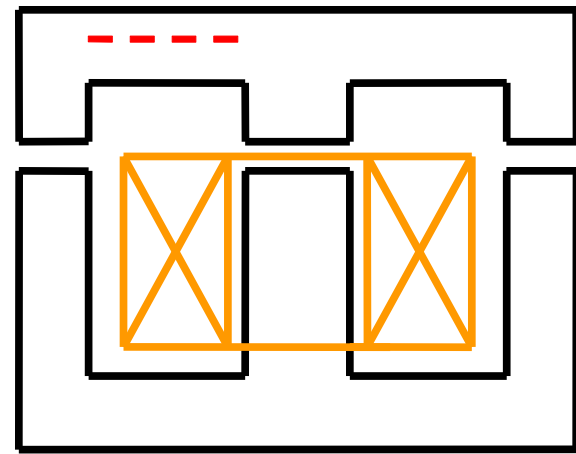
2.

3.

***4.**

6.1





6.1.1

1.

B

$$B = \frac{F}{\dots}$$

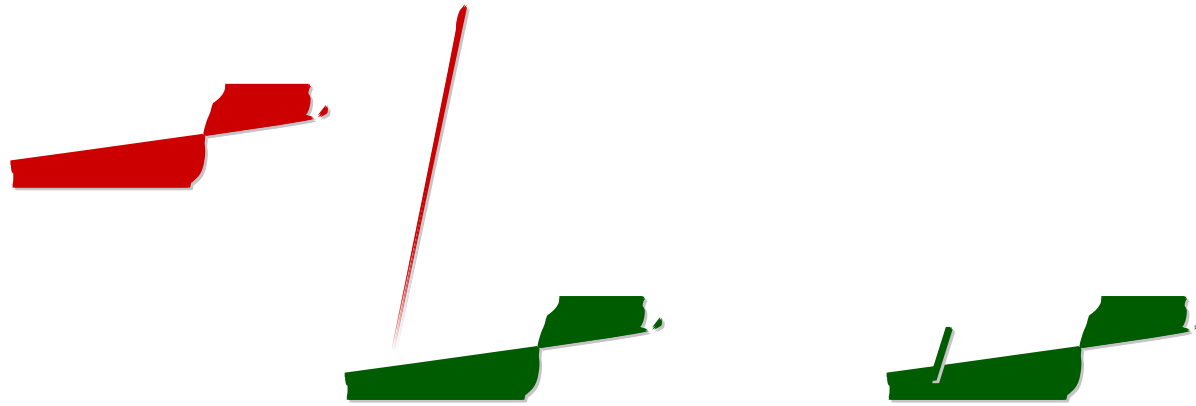
:

(T) 1T = 1Wb/ 2

:



2.



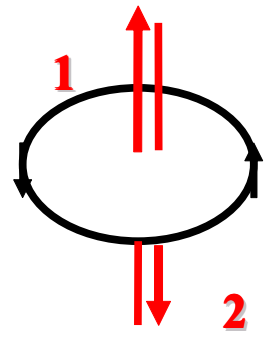
3



[](Wb) 1Wb = 1T²

/ A/

$$\int_{\Sigma} \oint H = \sum$$



= —

4.



$$= \frac{1}{L} \text{ H/}$$

$$= \frac{1}{L} = \frac{1}{L} = \frac{1}{L}$$

$$L = 4 \times 10^{-7} \text{ H/}$$



r

0

$$\begin{array}{c} = \\ \hline 0 \end{array} = \begin{array}{c} = \\ \hline 0 \end{array} = \begin{array}{c} = \\ \hline 0 \end{array}$$

0

6.1.2



1.

2×10^5)

$\gg 1$ (

2.

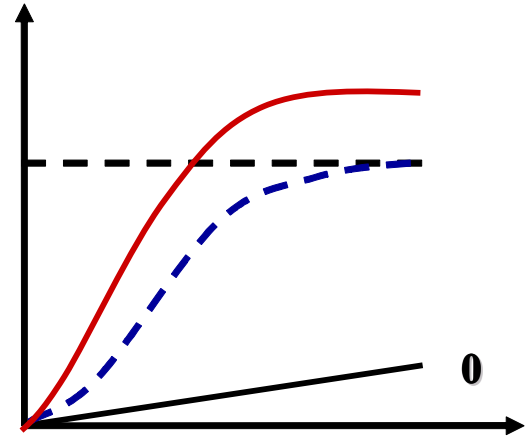


J

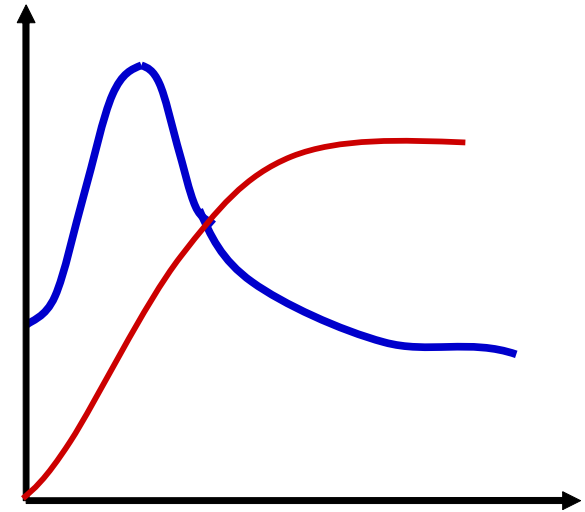
0

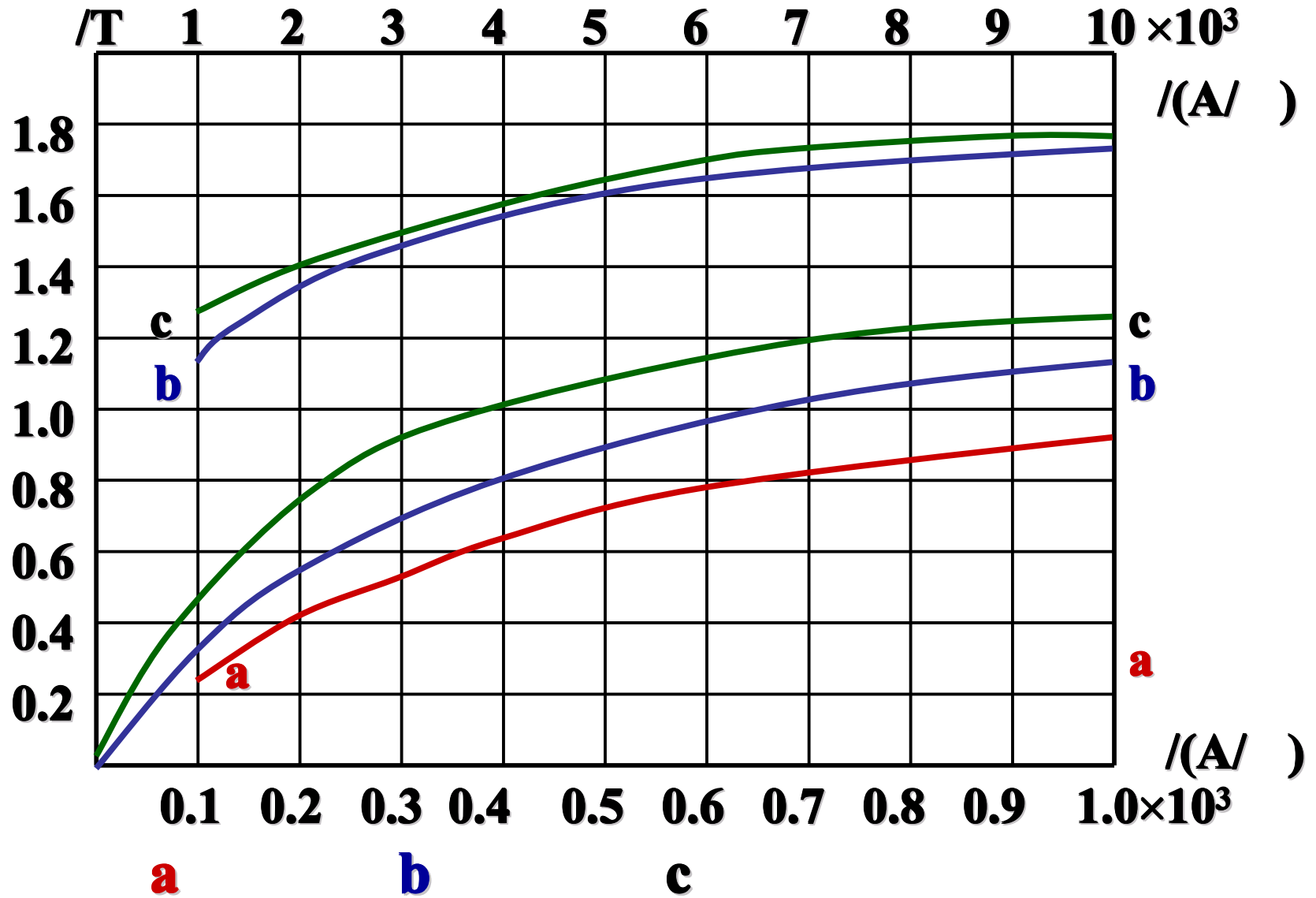
J

-



(Φ)



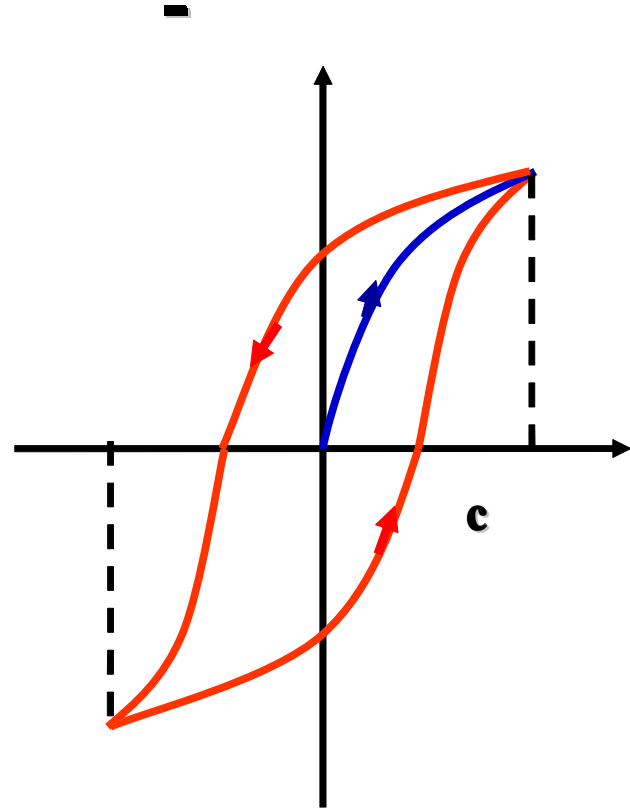


3



∴

(= 0)

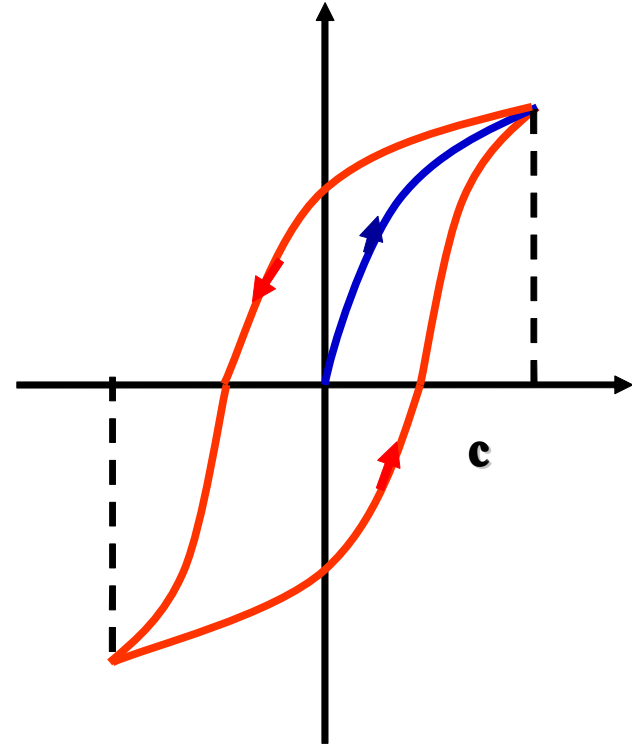


3.



$$= \mathbf{0}$$

c



(1)

(2)

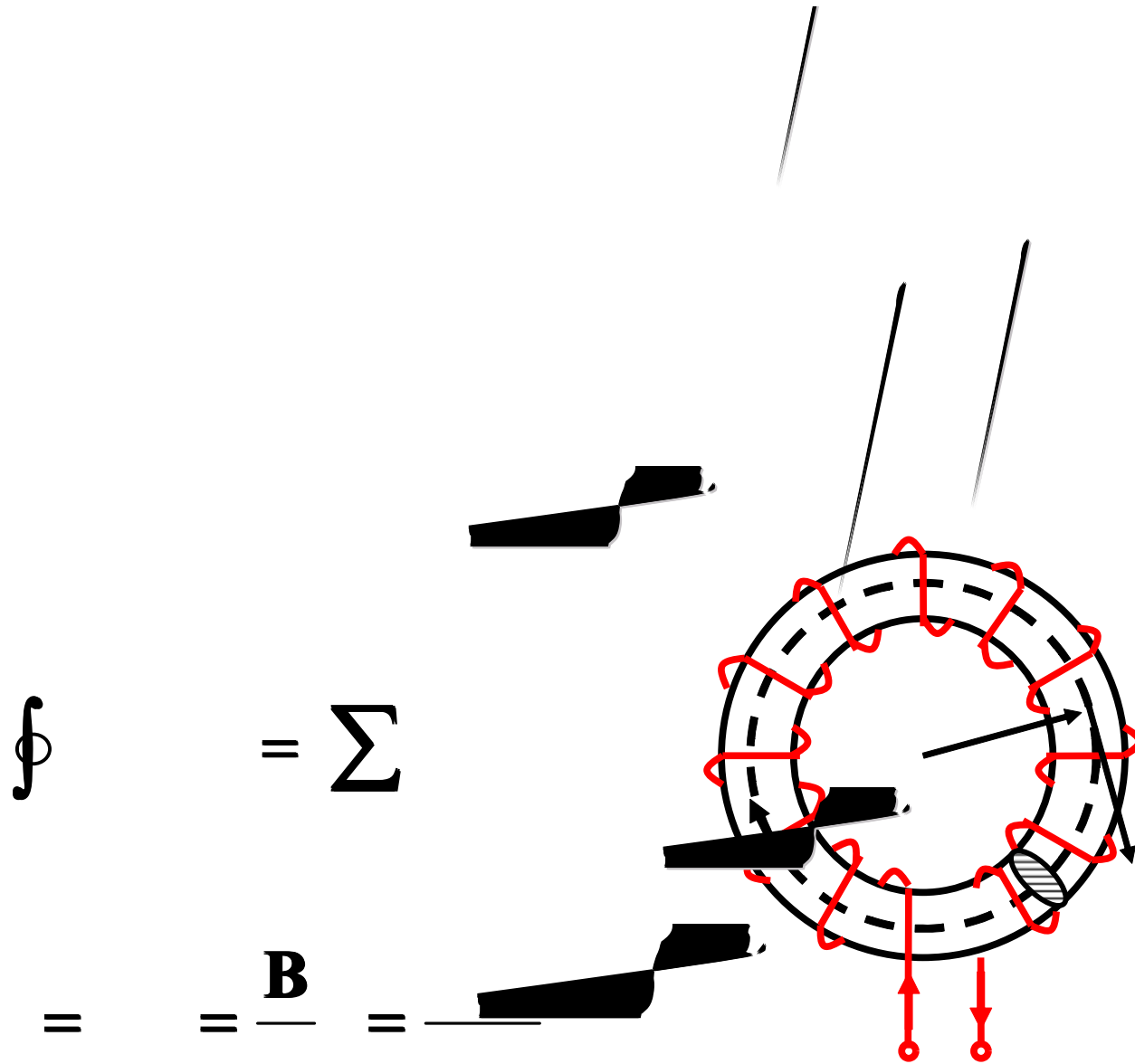
(3)



6.1.3



1.

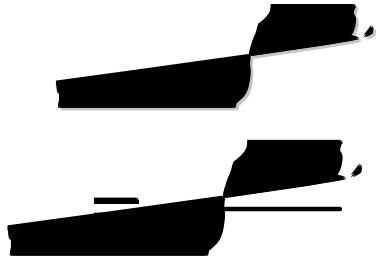




$$\begin{array}{c} = \text{---} = \text{---} \\ \text{---} \end{array}$$



2.





⋮



(1)

$$1 = \frac{1}{1}, \quad 2 = \frac{1}{S_2}, \quad \dots, \quad = \frac{1}{S_2}$$

(2)

(), 1

2

1

2

(3)

(4)

$$= \sum_{=1}$$

6.2.2

KVL:

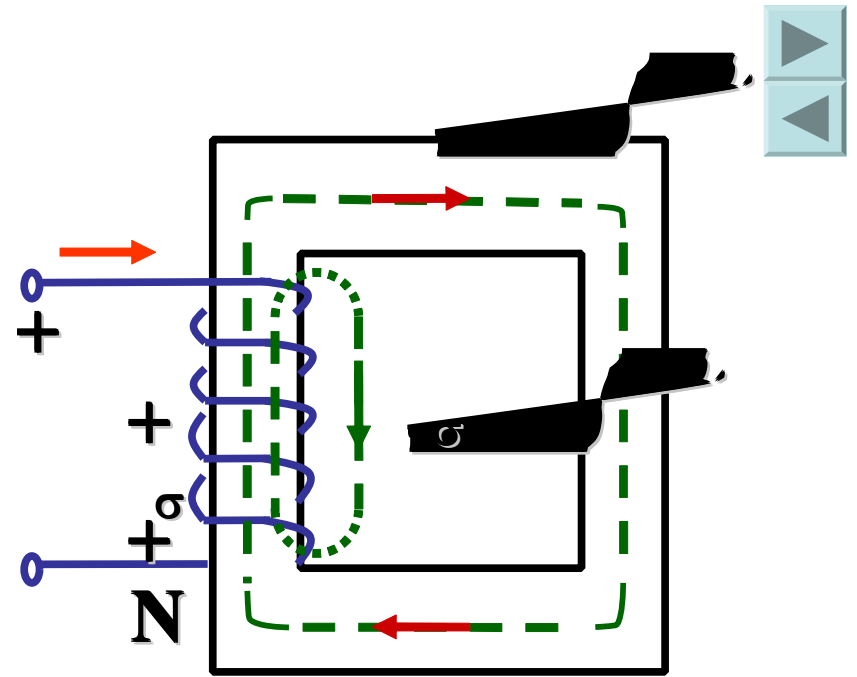
$$= - -$$

$$= + - + (-)$$

σ

$$\dot{=} \dot{+} (- \dot{+}) + (- \dot{+})$$

$$\dot{=} \dot{+} \dot{+} (- \dot{+})$$

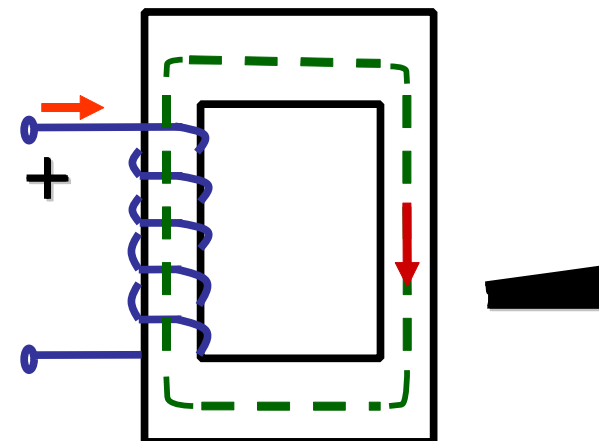


6.2.3



1. (Δ_c)

$$\Delta_c = 2 \Delta_c$$

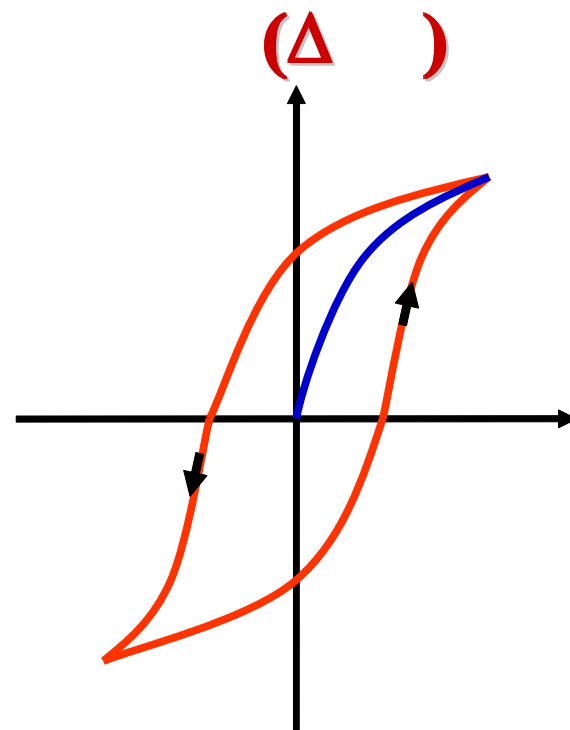


2. (Δ_F)

$$\Delta_F$$

1

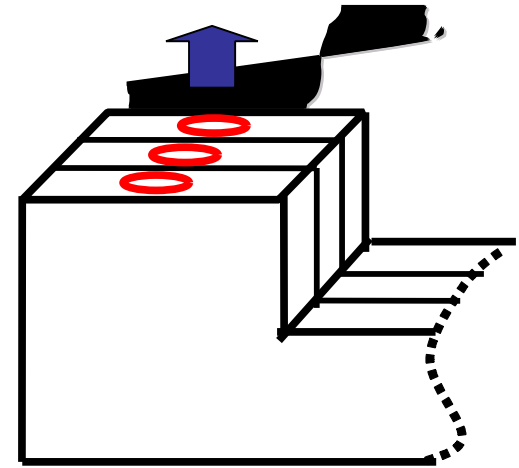
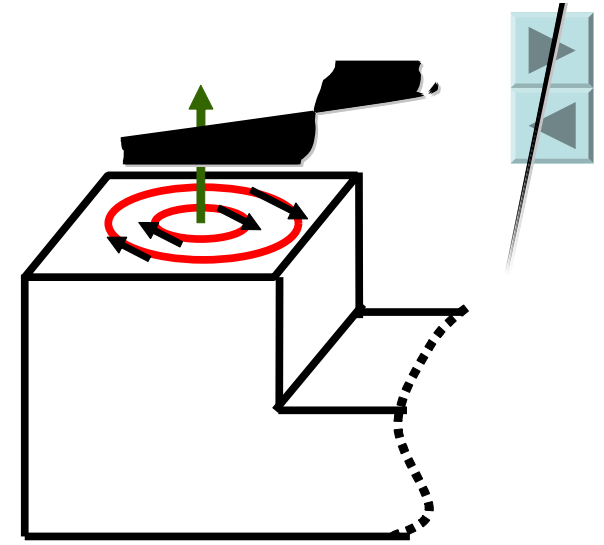
Δ



(2)

Δ

:



$$= \mathbf{c} = 2 + \mathbf{F}$$

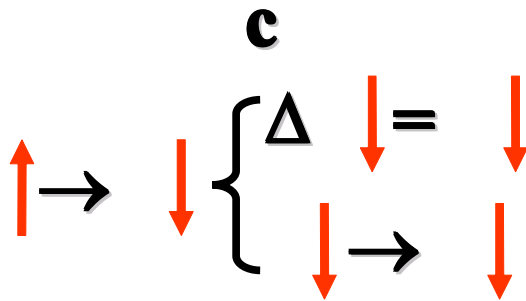


6.3

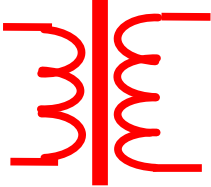
6.3.1

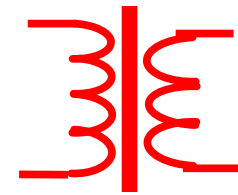


= **c**

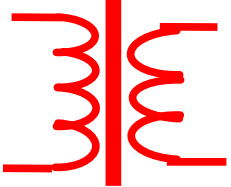


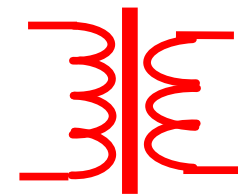


10.5kV  220kV



10kV 

...  $\frac{380}{220V}$

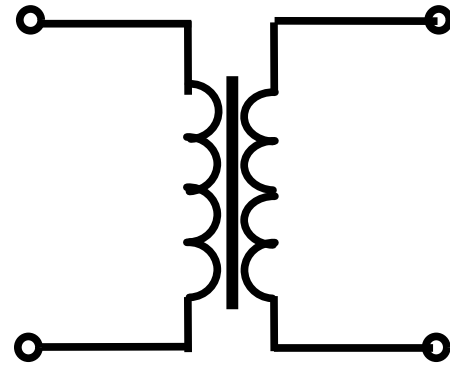


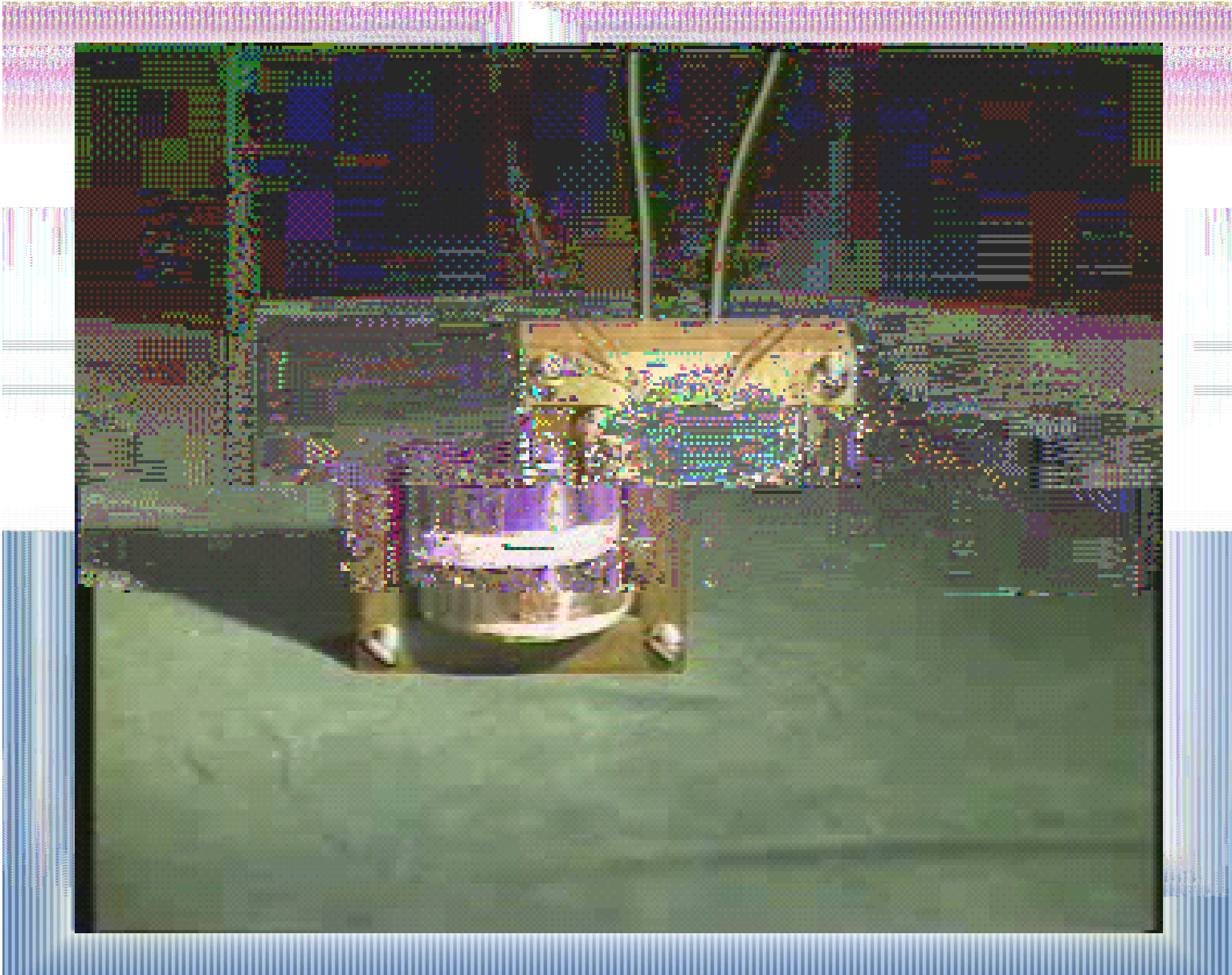
36V

1.

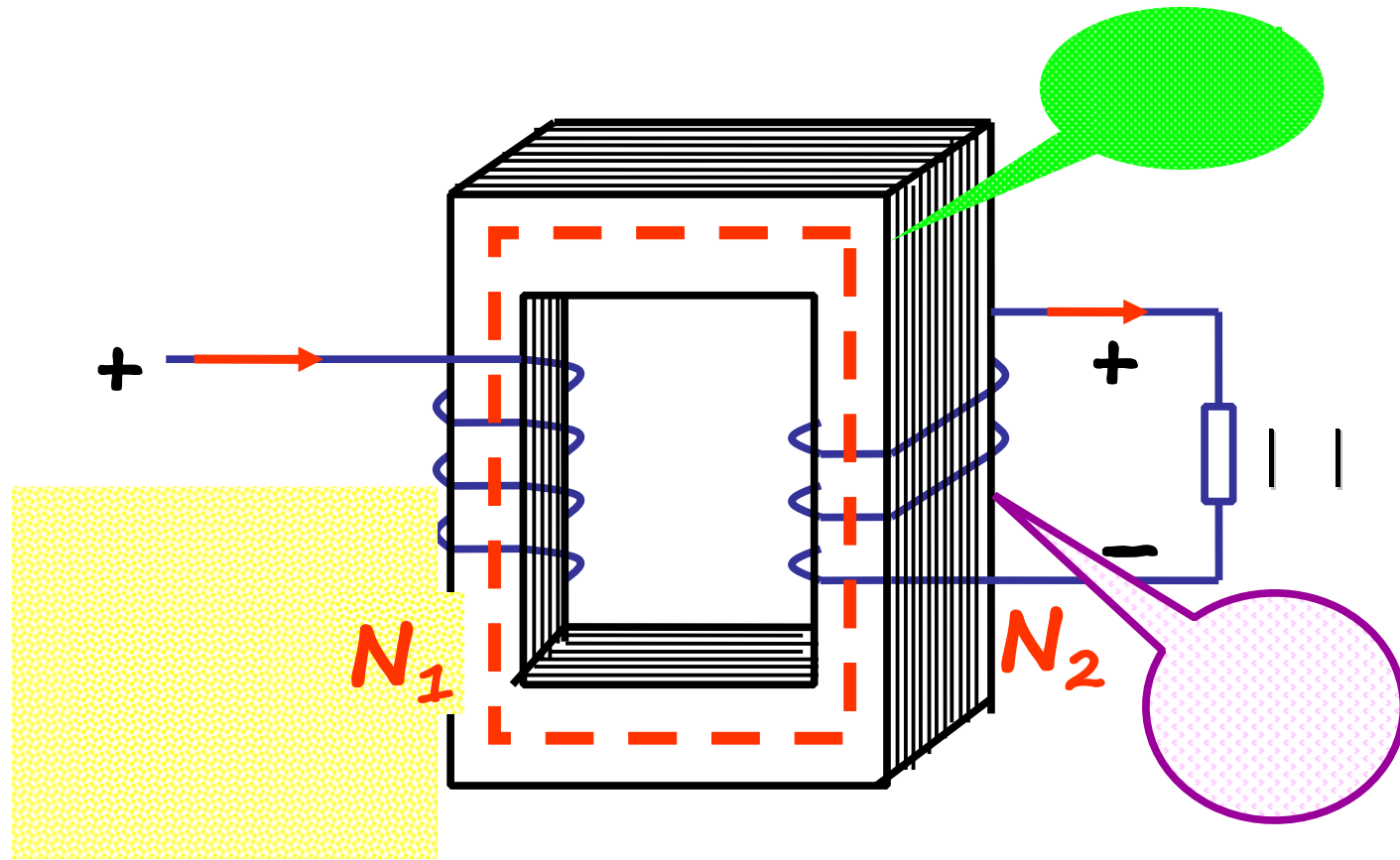


()





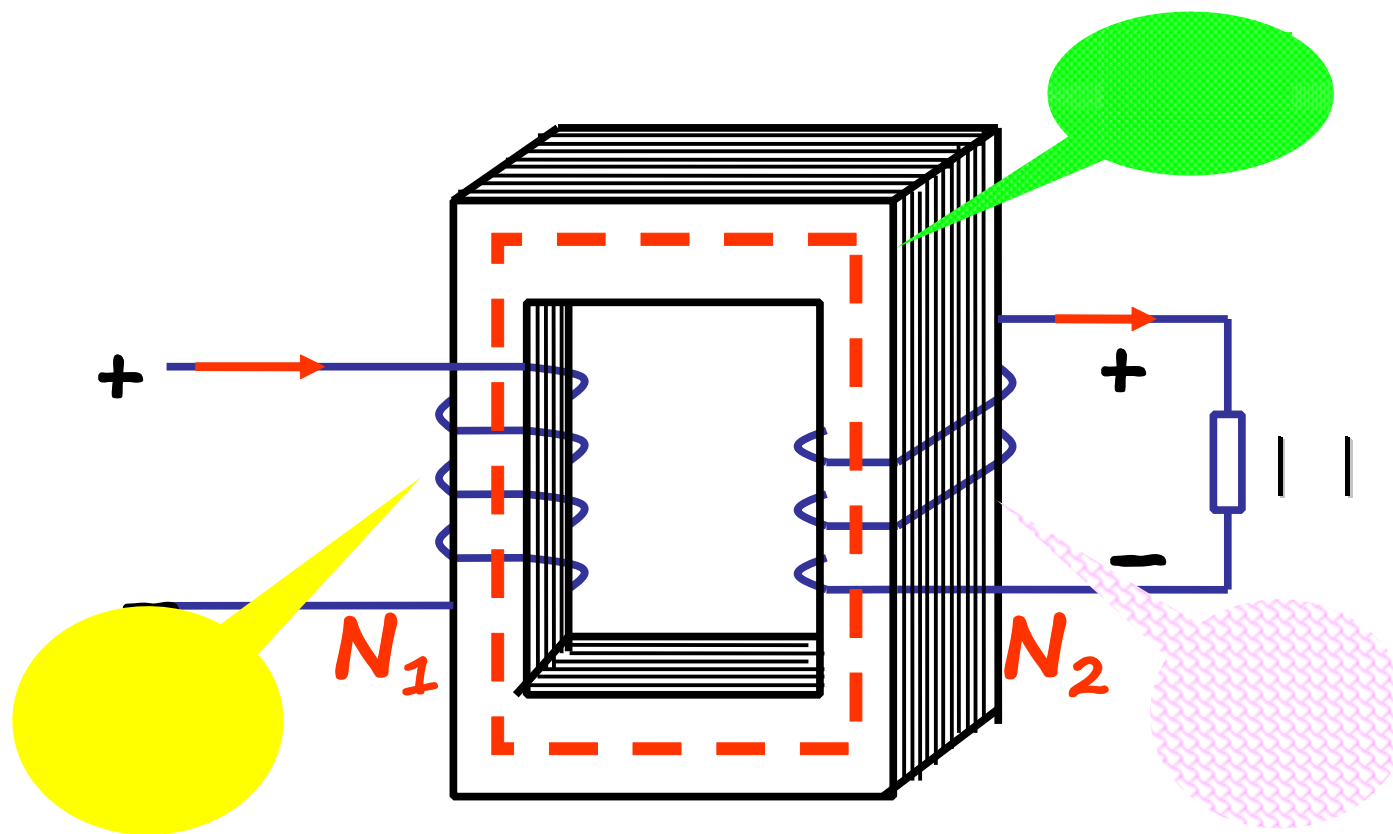
2.



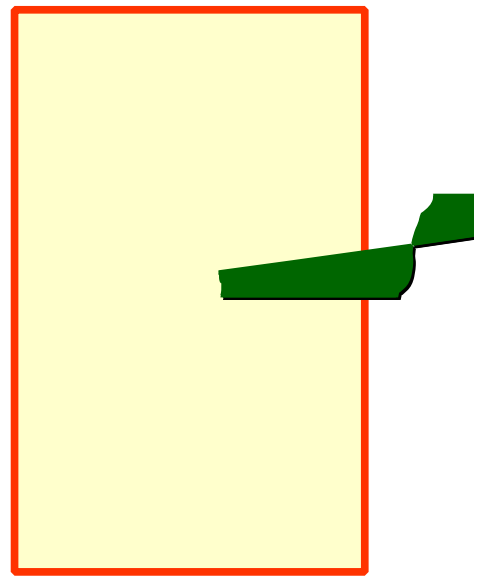
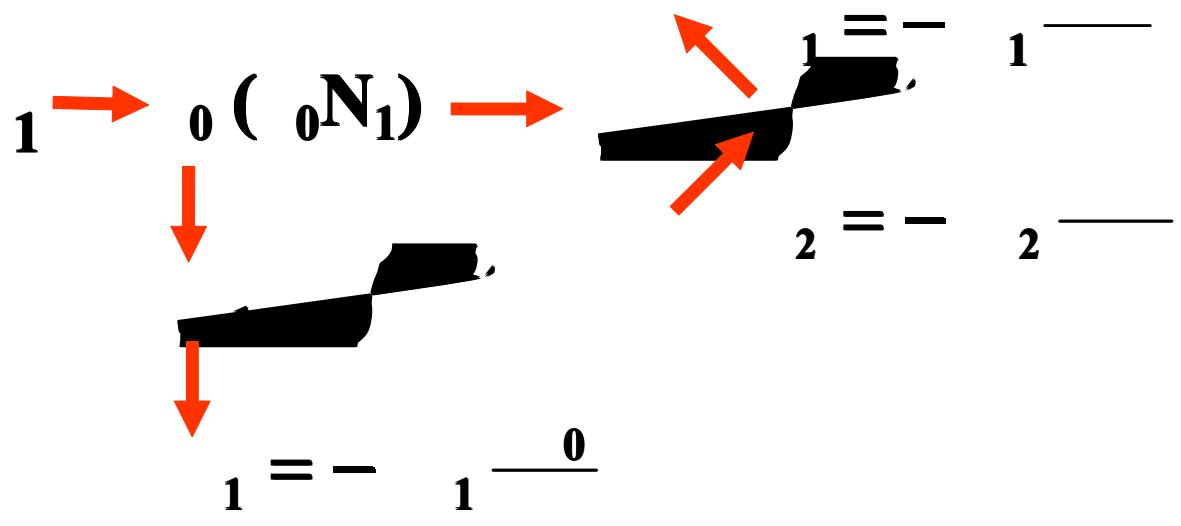
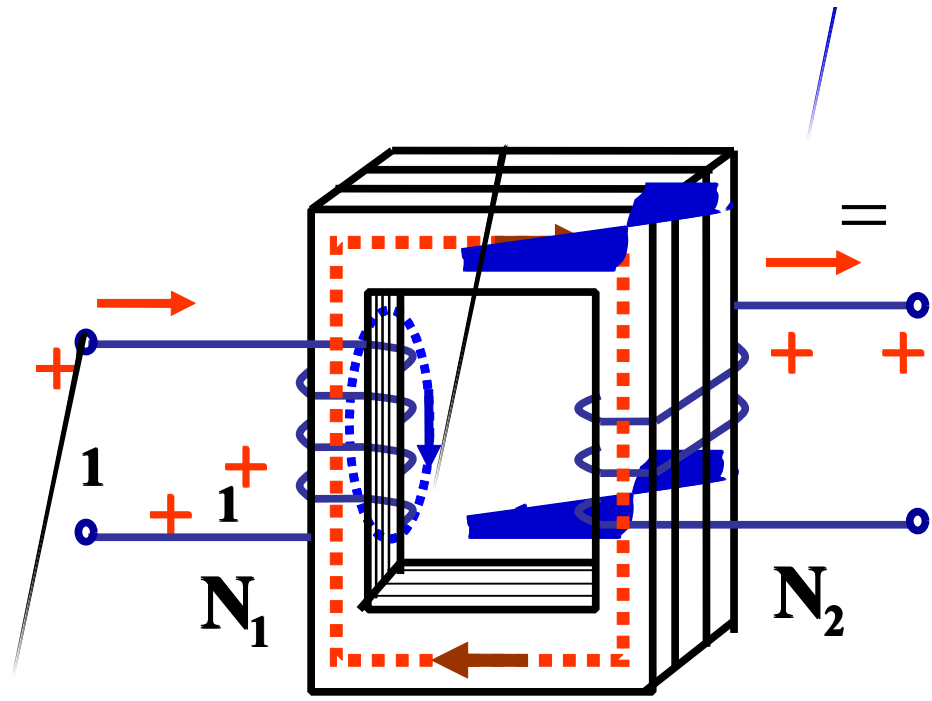
0.35mm

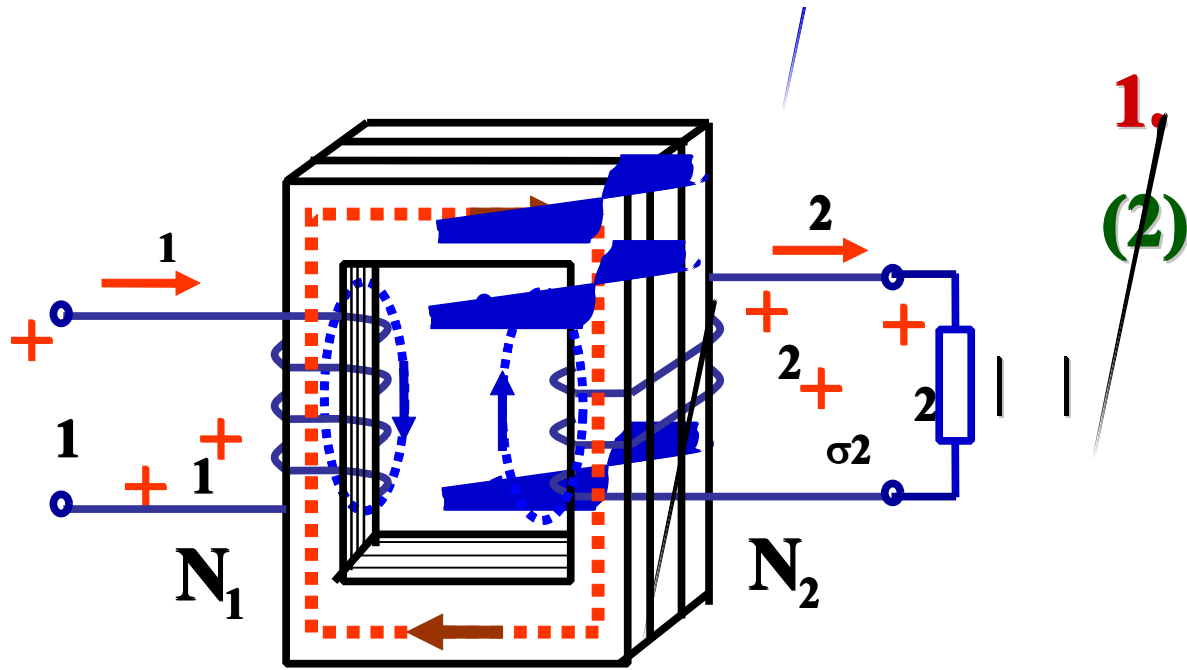
0.5mm

6.3.2

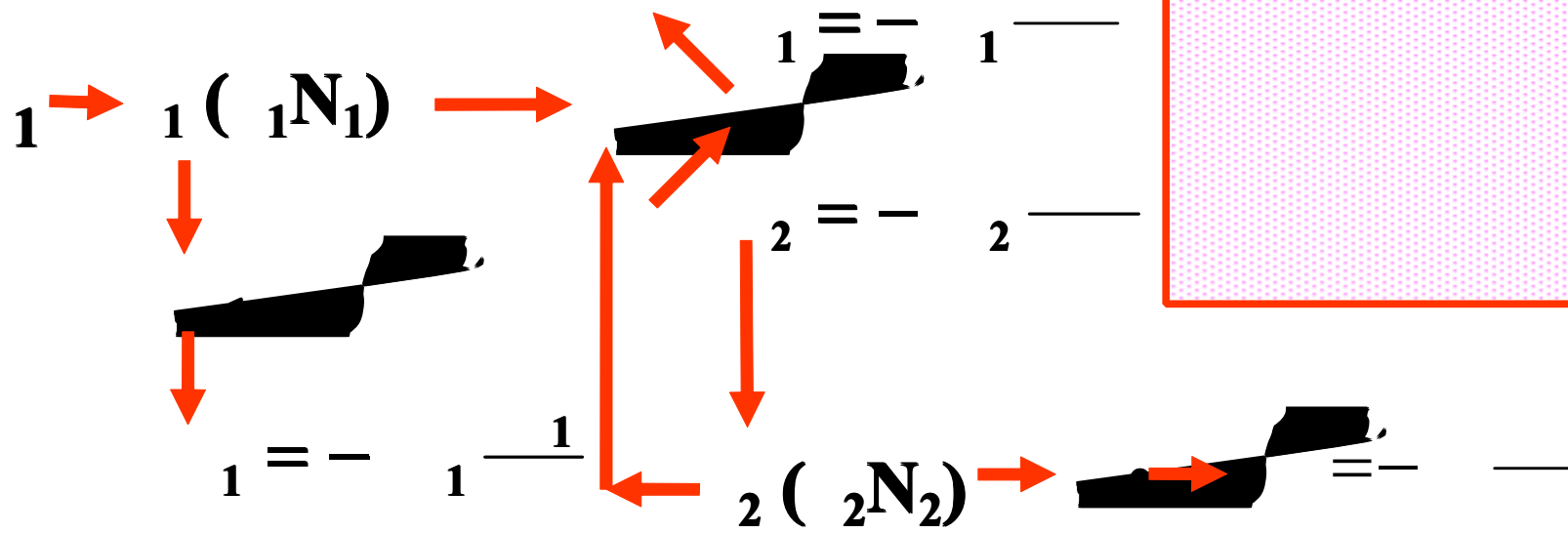


1.
(1)





1.
(2)



2.

(1)



$$\Phi = \Phi$$

$$= - \frac{\Phi}{1} = - \Phi$$

$$= - 1 \angle -90^\circ$$

$$= 1 \angle (-90^\circ)$$

$$\therefore \frac{1}{1} = \frac{1}{\sqrt{2}} = \frac{2}{\sqrt{2}} \Phi$$
$$\frac{1}{1} = 4.44 \angle -90^\circ$$

$$\frac{2}{2} = 1 \angle (-90^\circ)$$

$$\frac{2}{2} = 4.44 \angle -90^\circ$$

(2)



KVL

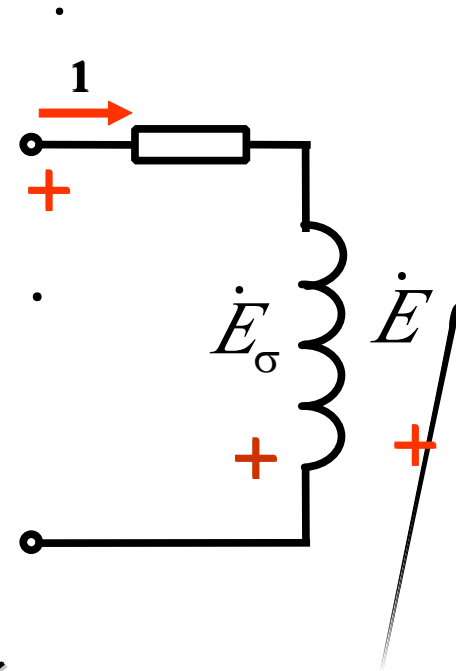
$$\begin{aligned}
 \dot{U}_1 &= \dot{U}_{R1} - \dot{U}_{L1} \\
 &= \dot{U}_1 + \dot{U}_1 - \dot{U}_1
 \end{aligned}$$

1 ;

$$\dot{U}_1 = \sigma \dot{U}_1$$

1 ()

$$\dot{U}_1 \approx - \dot{U}_1 \rightarrow \dot{U}_1 \approx \dot{U}_1 = 444$$



KVL



2

$$\text{---} \approx \frac{E}{E} = \text{---} =$$

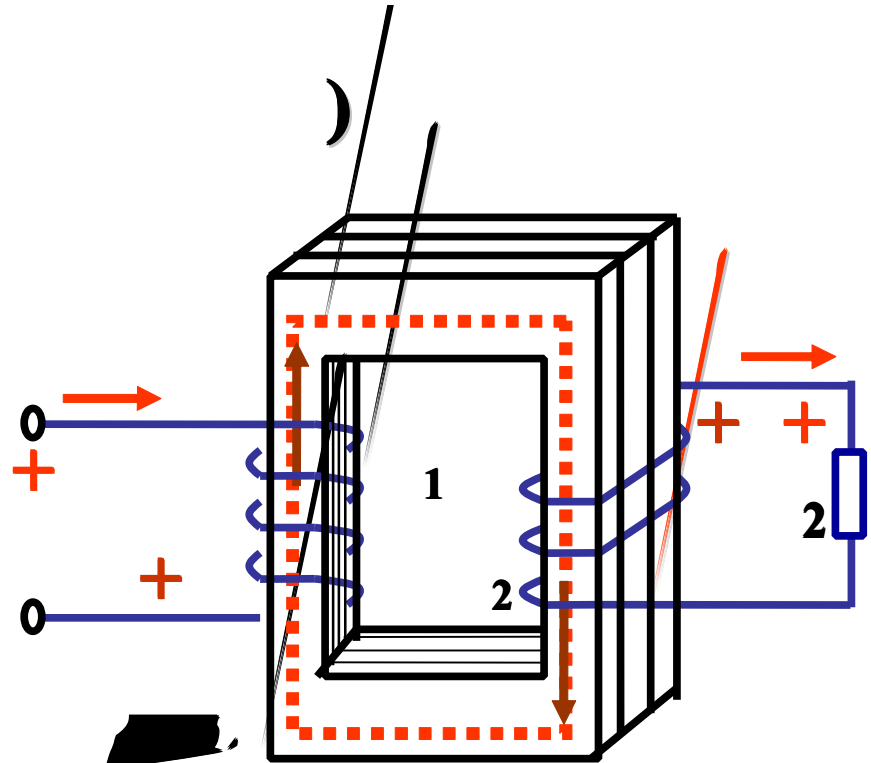
3.

(

)



$$\rightarrow \dot{} = \dot{}$$



$$1 \approx 1 = 4 \ 44$$

1

$$0 \ 1 \rightarrow$$

$$1 \ 1^+ \ 2 \ 2 \rightarrow$$



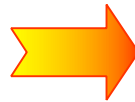
$$\frac{1 \ 1^+ \ 2 \ 2}{1 \ 1} = \frac{0 \ 1}{1}$$

$$\frac{1 \ 1}{0 \ 1} = \frac{1^- \ 2 \ 2}{2} \left\{ \begin{array}{l} 1. \\ 2. \end{array} \right.$$

$$0 \approx (2 \ 3) \% \ 1N$$

$$\frac{1 \ 1}{2 \ 2} \approx \frac{1 \ 1}{2 \ 2}$$

$$\frac{1 \ 1}{2 \ 2} \approx \frac{2 \ 2}{2 \ 2}$$

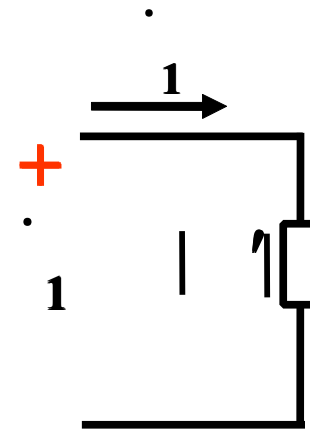
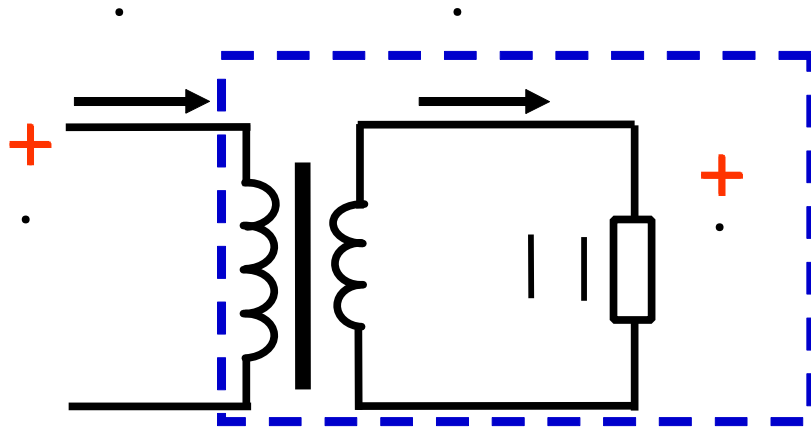


$$\frac{1 \ 1}{2 \ 2} \approx \frac{2 \ 2}{2 \ 2} = \frac{2 \ 2}{2 \ 2}$$





4.



$$\left| \right| = \frac{2}{2}$$

$$\left| \right|' = \frac{1}{1}$$

$$\left| \right|' = \frac{1}{1} = \frac{1}{1} = \frac{1}{1} = \frac{1}{1} = \left| \right|$$

$$\left| \right|' = \left| \right|$$

2

1:

$$= 120V$$

$$= 800$$

Ω

$$= 8\Omega$$

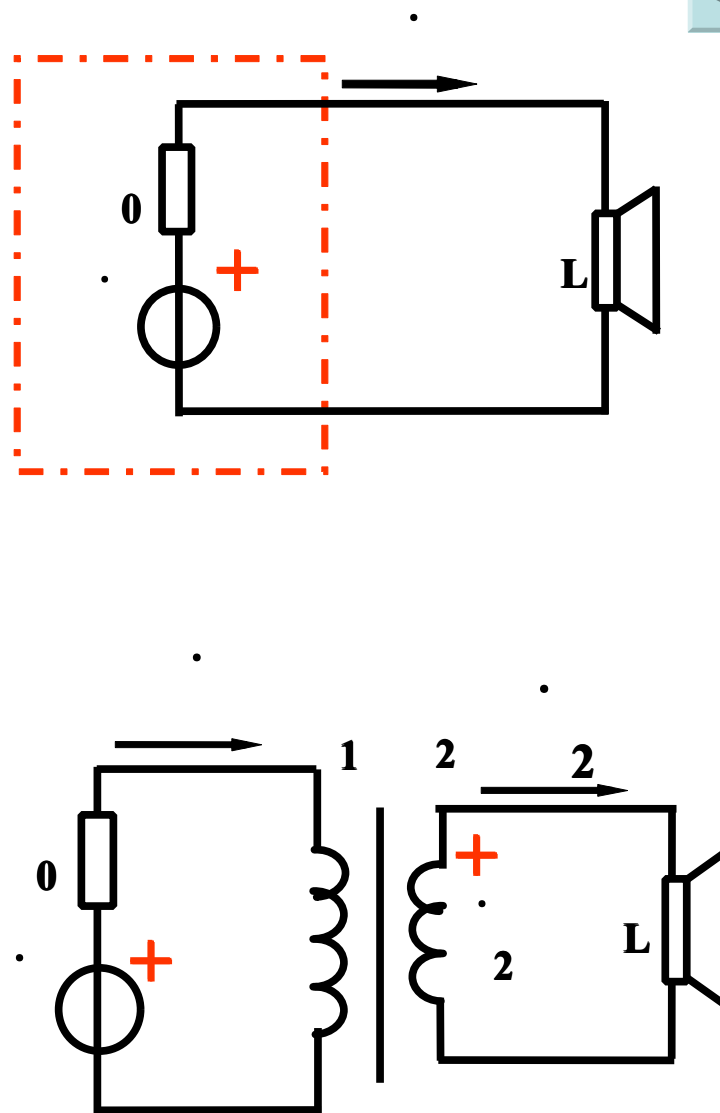
(1) , L
 $=$

2

,

(1)

$$= \sqrt{\quad} = \sqrt{\quad} =$$





$$= \left(\frac{120}{800 + 800} \right)^2 \times 800 = 45 \text{ W}$$

2

$$= \left(\frac{120}{800 + 8} \right)^2 \times 8 = 0.176 \text{ W}$$

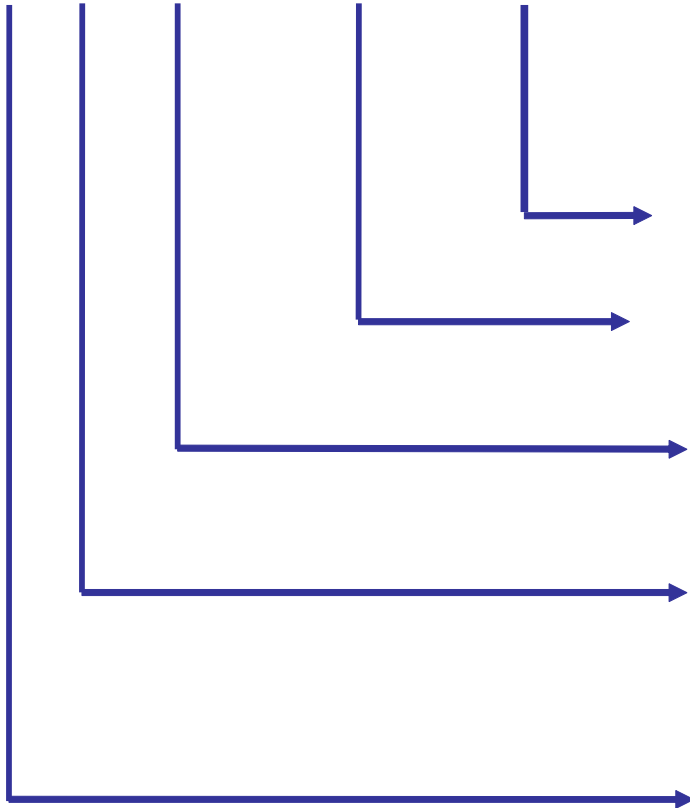
$$\underline{\underline{I_L = 0}}$$



5.

1)

S J L —1000/10



(V)

(VA)

**{ J:
F:**

**{ S:
D:**

2)



1N **2N**



1N

2N

1N

2N

1N

2N



2)



N



$$N = \frac{2N}{2N} \approx \frac{1N}{1N}$$

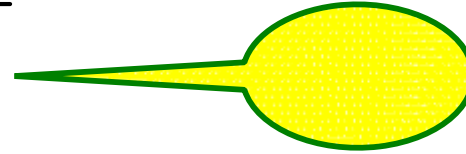
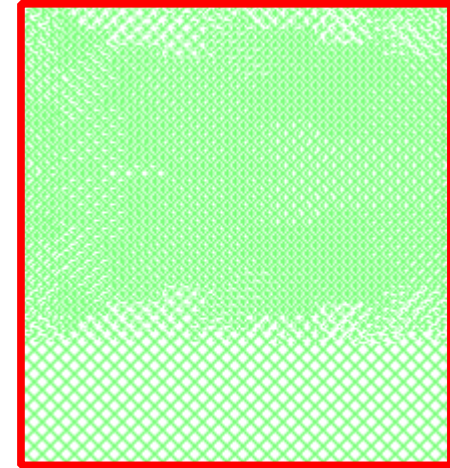
$$N = \sqrt{3} \frac{2N}{2N} \approx \sqrt{3} \frac{1N}{1N}$$

()



$$N = \frac{1N}{2} \times \frac{1N}{2} \mathbf{c}$$

$$1 = \frac{2}{2}$$



N ≠

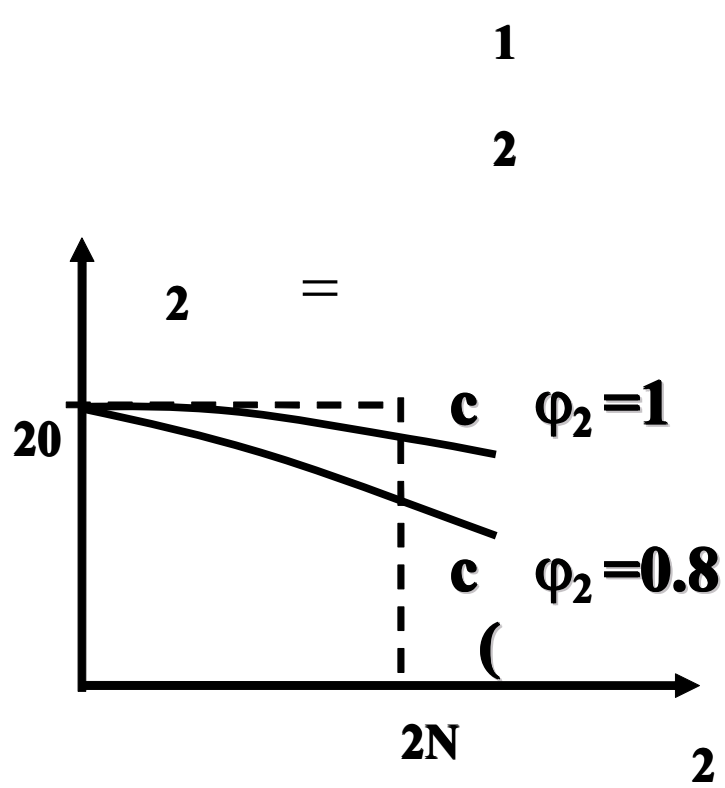
2

1 ≠

2

6.3.3

1.



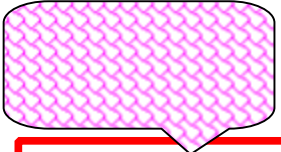

$$\Delta \% = \frac{20 - 2}{20} \times 100 \% = 5\%$$

2.



(Δ_c)

(Δ_F)


$$= \frac{2}{1} = \frac{2}{2^+ \quad c^+ \quad F}$$

95% ,

(50 75)% ,

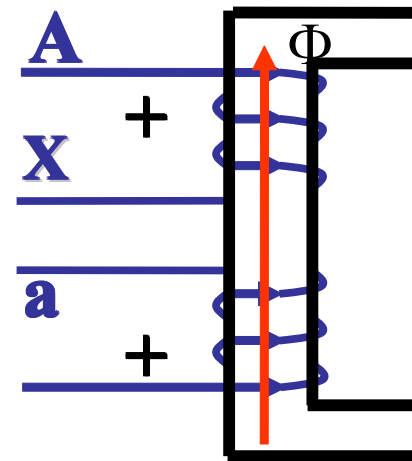
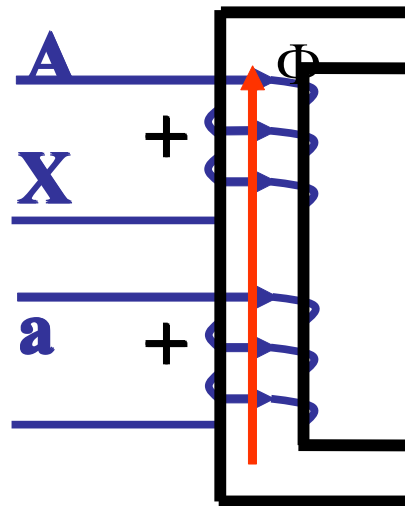
6.3.4

1.

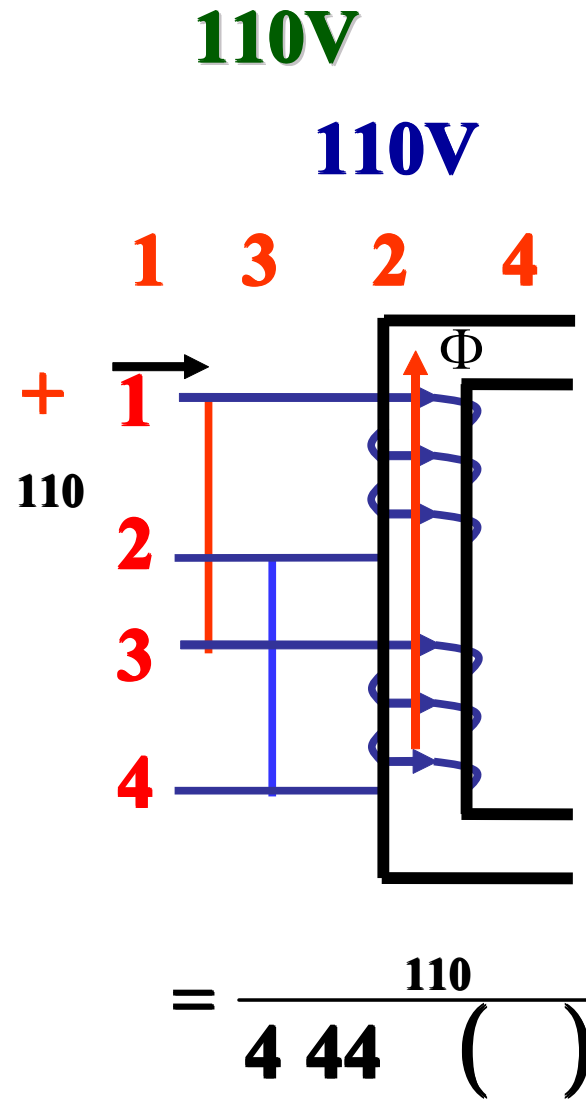
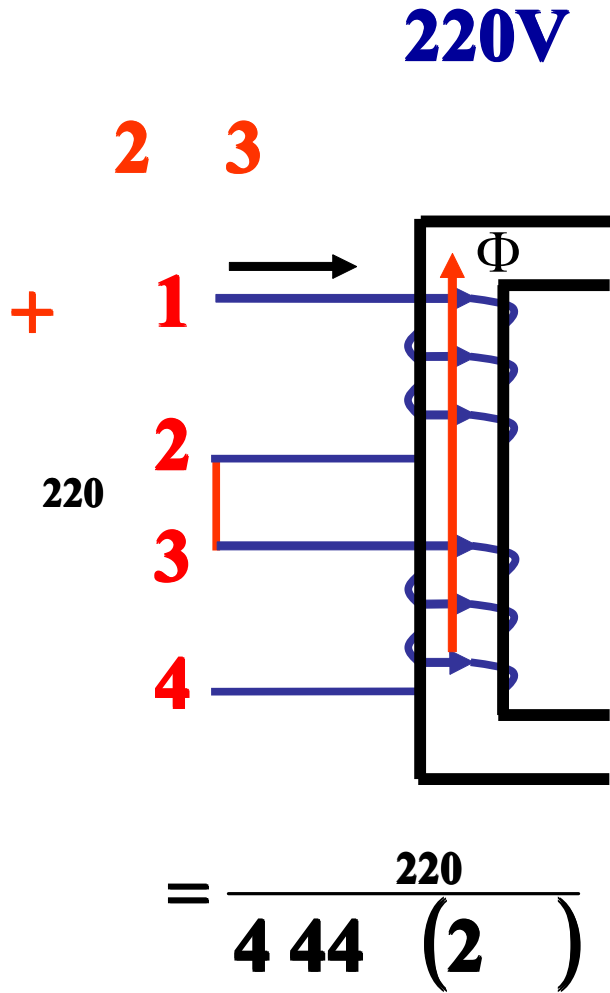
()

(

(



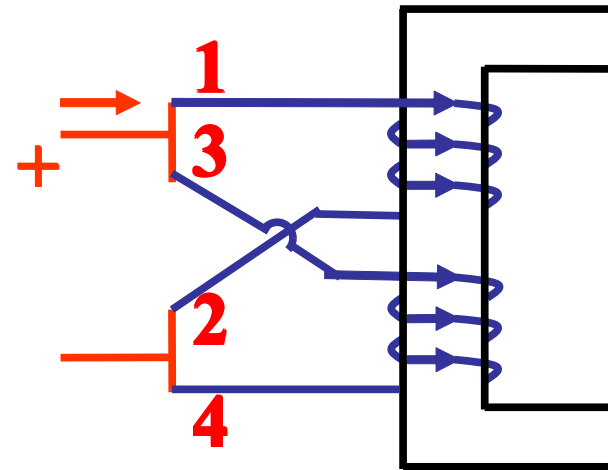
2.



(220/110)



1 **110V**

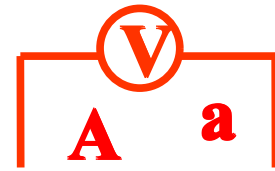


2



$$\frac{1}{1} = \frac{1}{1} \quad \frac{1}{1} = \frac{1}{1}$$

$$1 = \frac{\quad}{1}$$



(X -) ,

AX

AX

AX

Aa

a



A

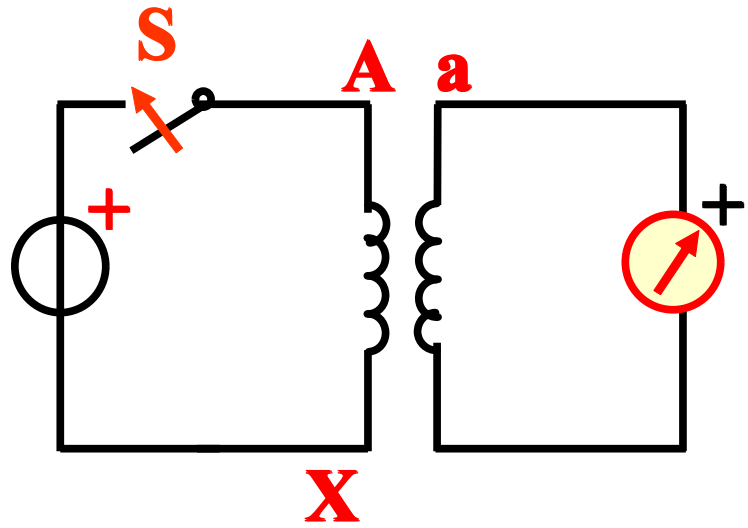
a

X

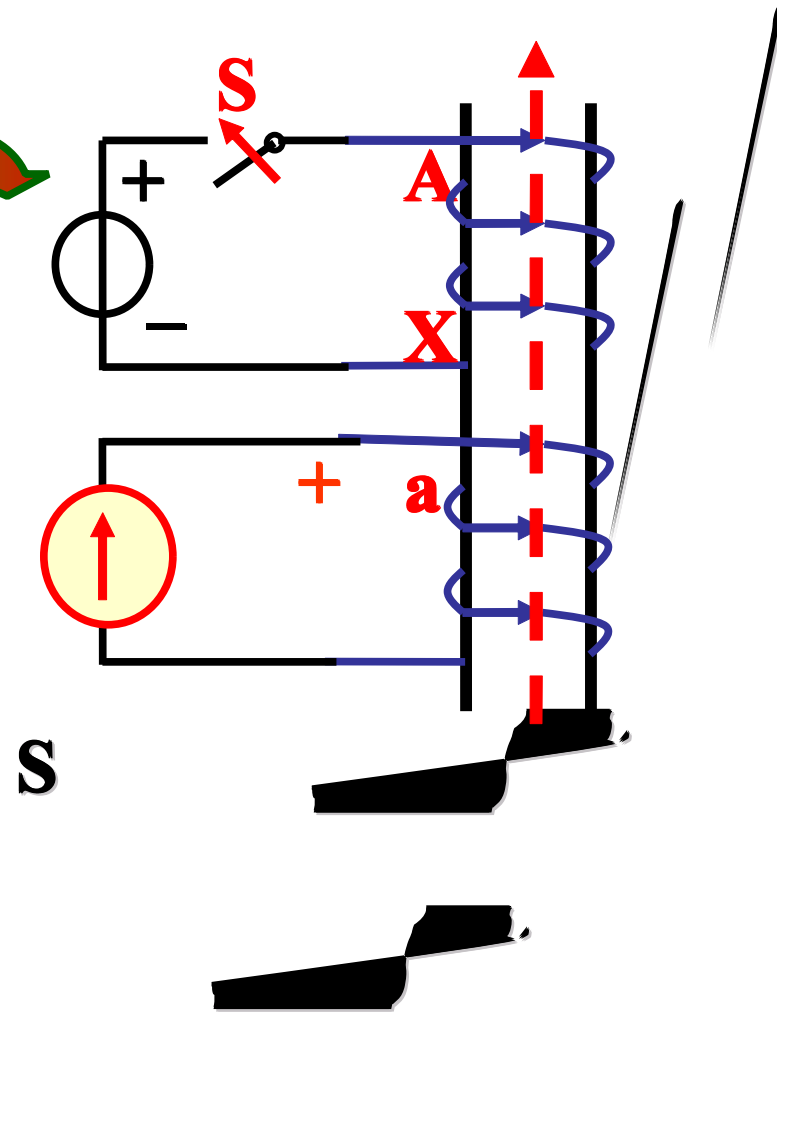
A

X

a

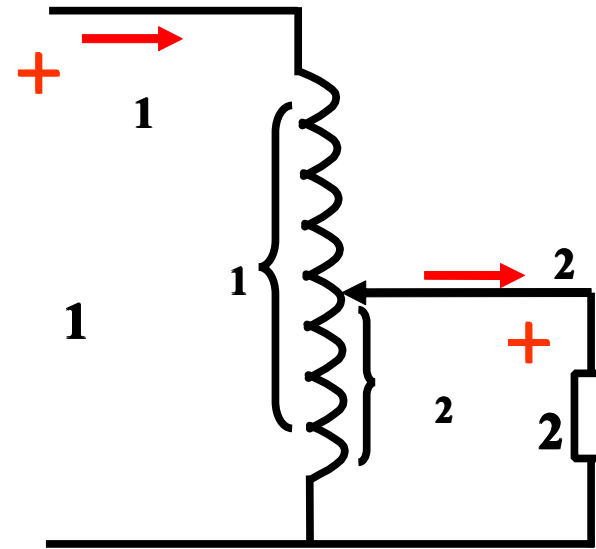


S
A-a
;
S
A-

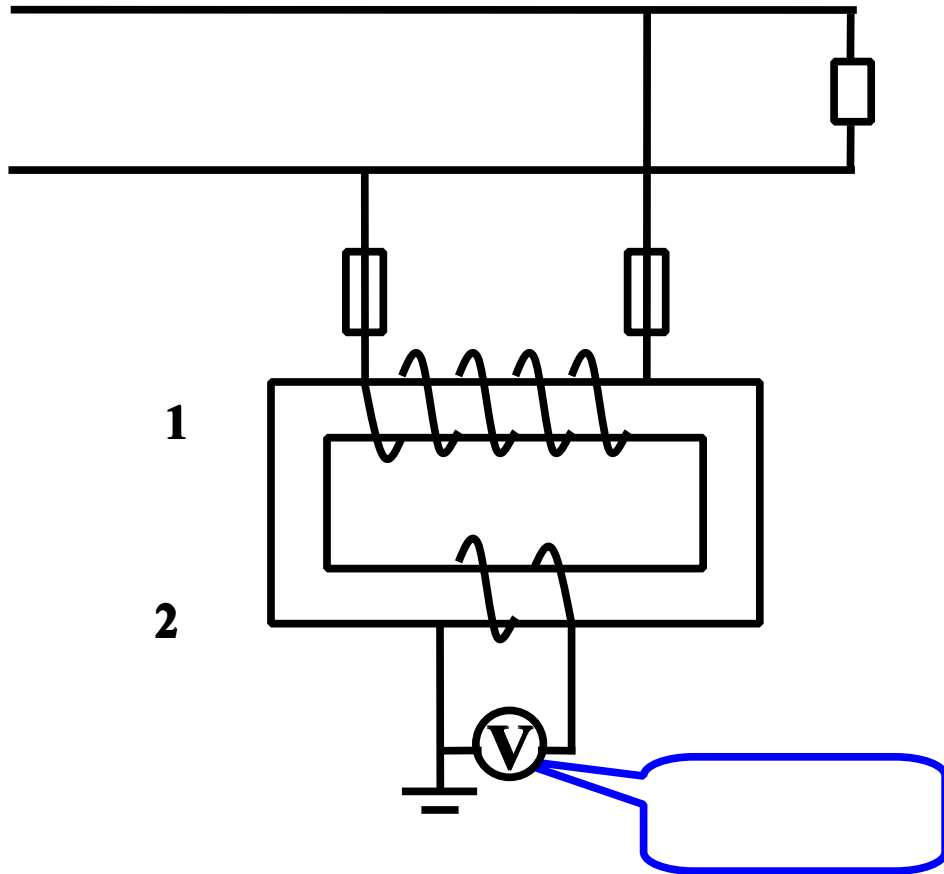


6.3.5

$$\frac{1}{2} = \frac{1}{2} =$$
$$\frac{1}{2} = \frac{2}{1} = \mathbf{1}$$



2.



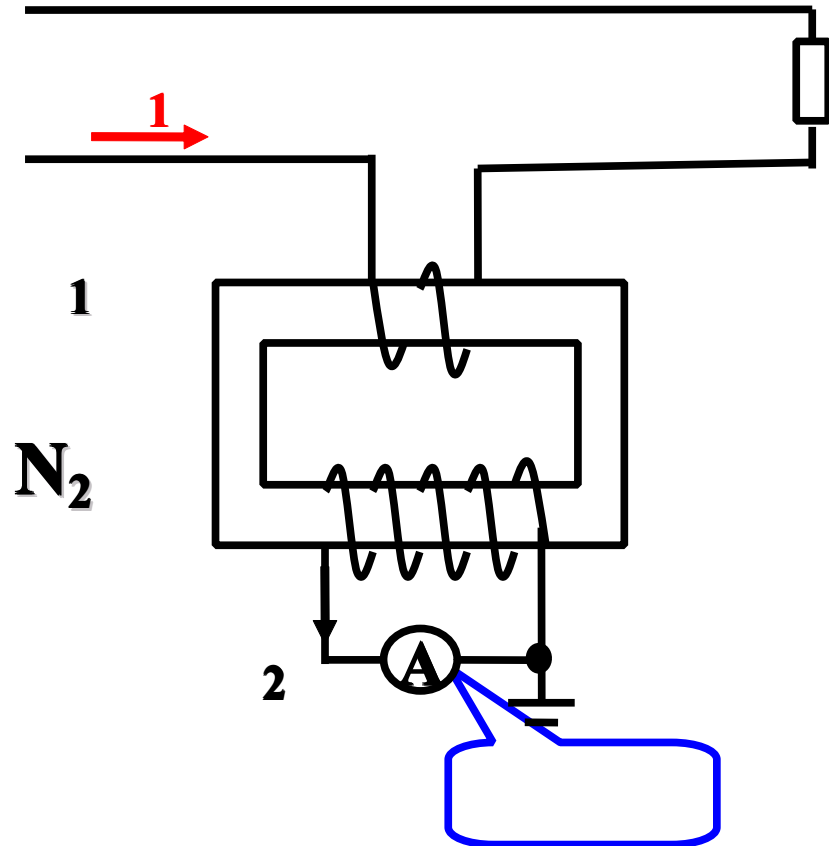
1.

2.

$$= \times \frac{1}{2}$$



3.



- 1.
- 2.

$$N_2 = N_1 \times \frac{2}{1}$$

