



6

6.1

6.2

6.3

*6.4

6



1.

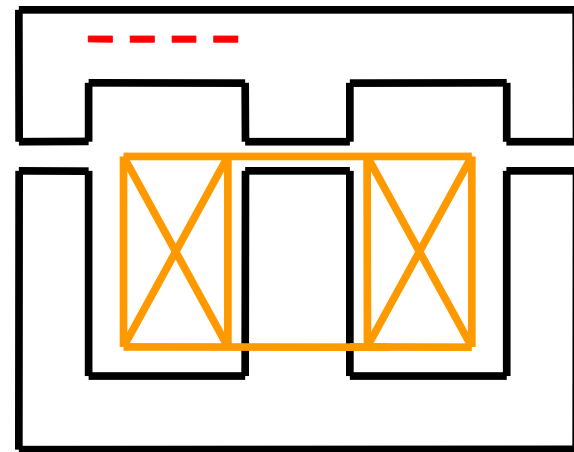
2.

3.

***4.**

6.1





6.1.1

1.

B

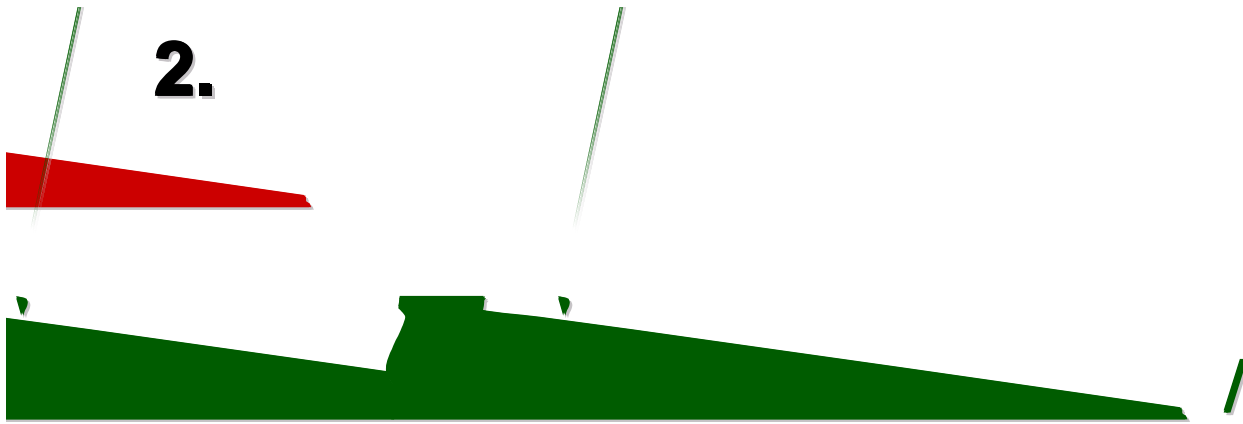
$$B = \frac{F}{\dots}$$

⋮

(T) 1T = 1Wb/ 2

⋮



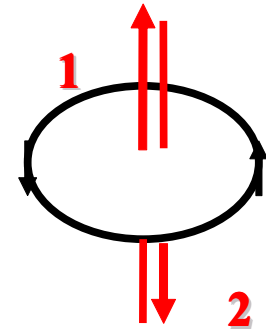


3

: [](Wb) 1Wb = 1T²

/ A/

$$\oint_{\Sigma} H = \sum$$



= —

4.



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

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

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

6.1.2



1.

$\gg 1$ (

2×10^5)

2.



J

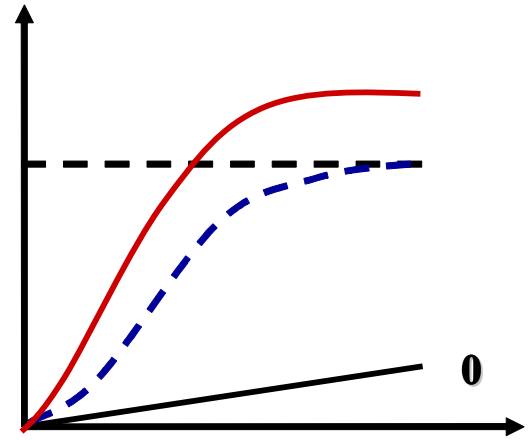
0

J

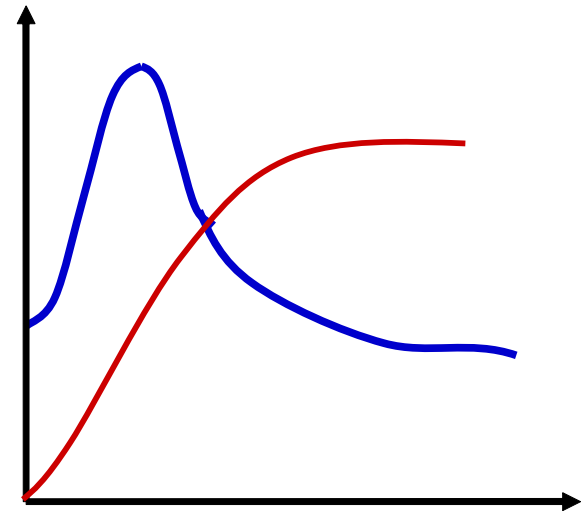
2011-11-1

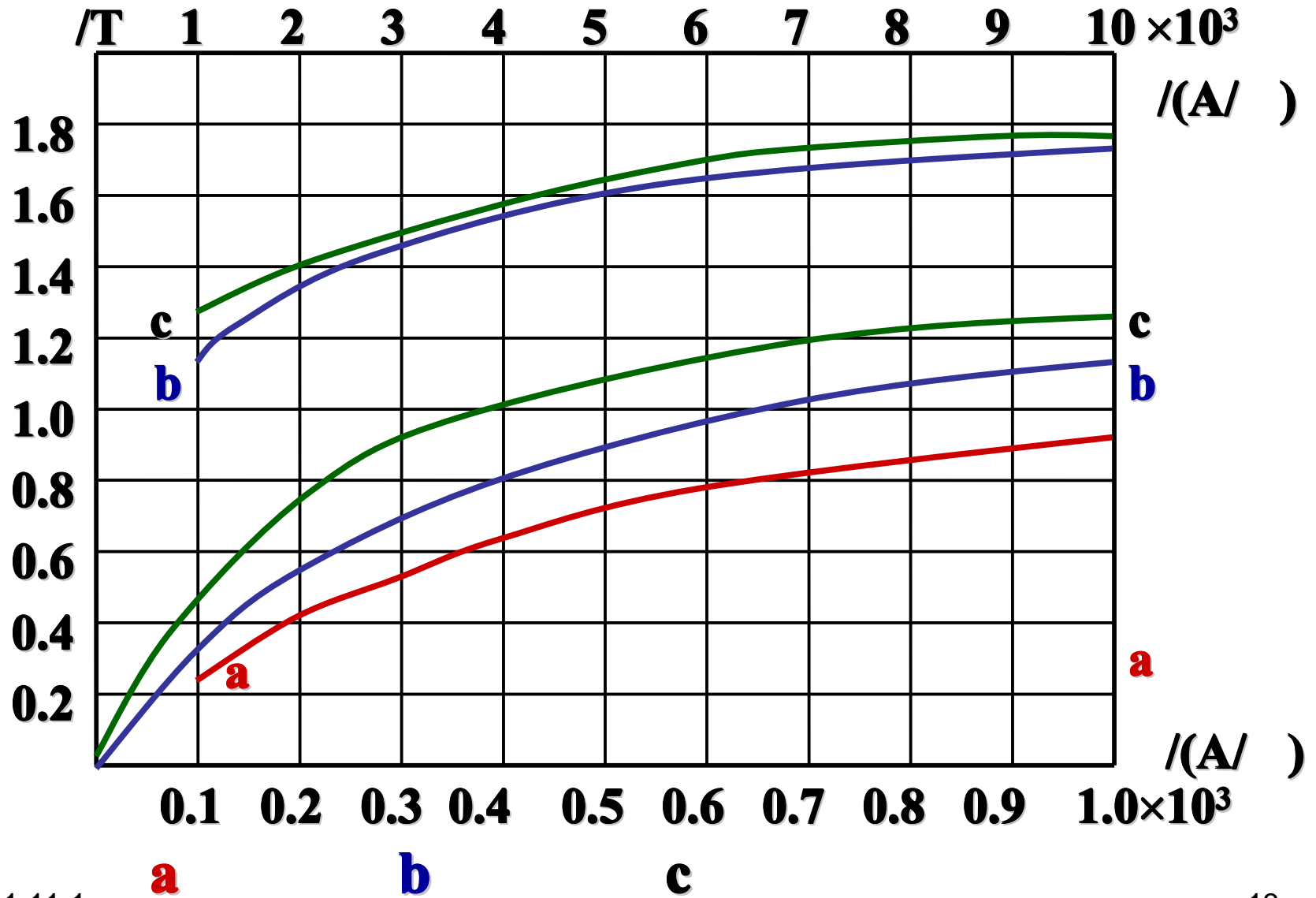
11

-



(Φ)



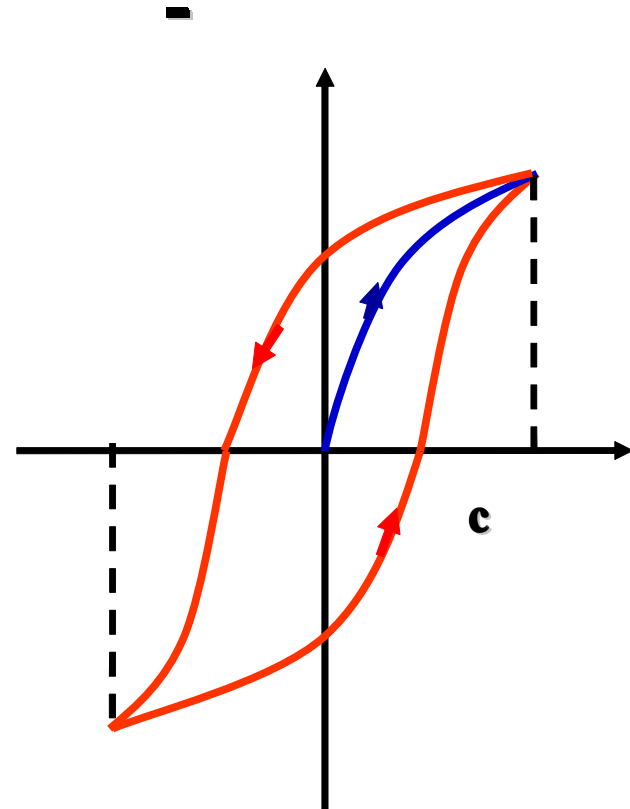


3

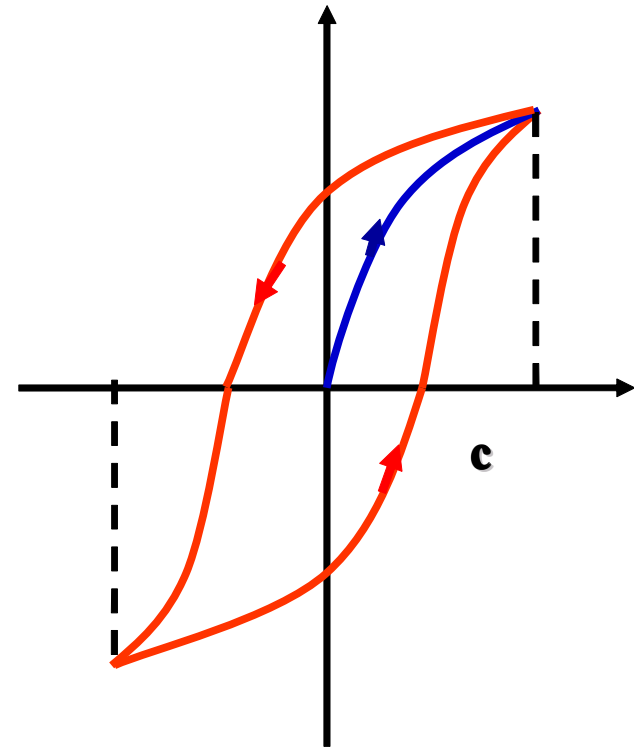


:

(= 0)



3.



$$= \mathbf{0}$$



(1)

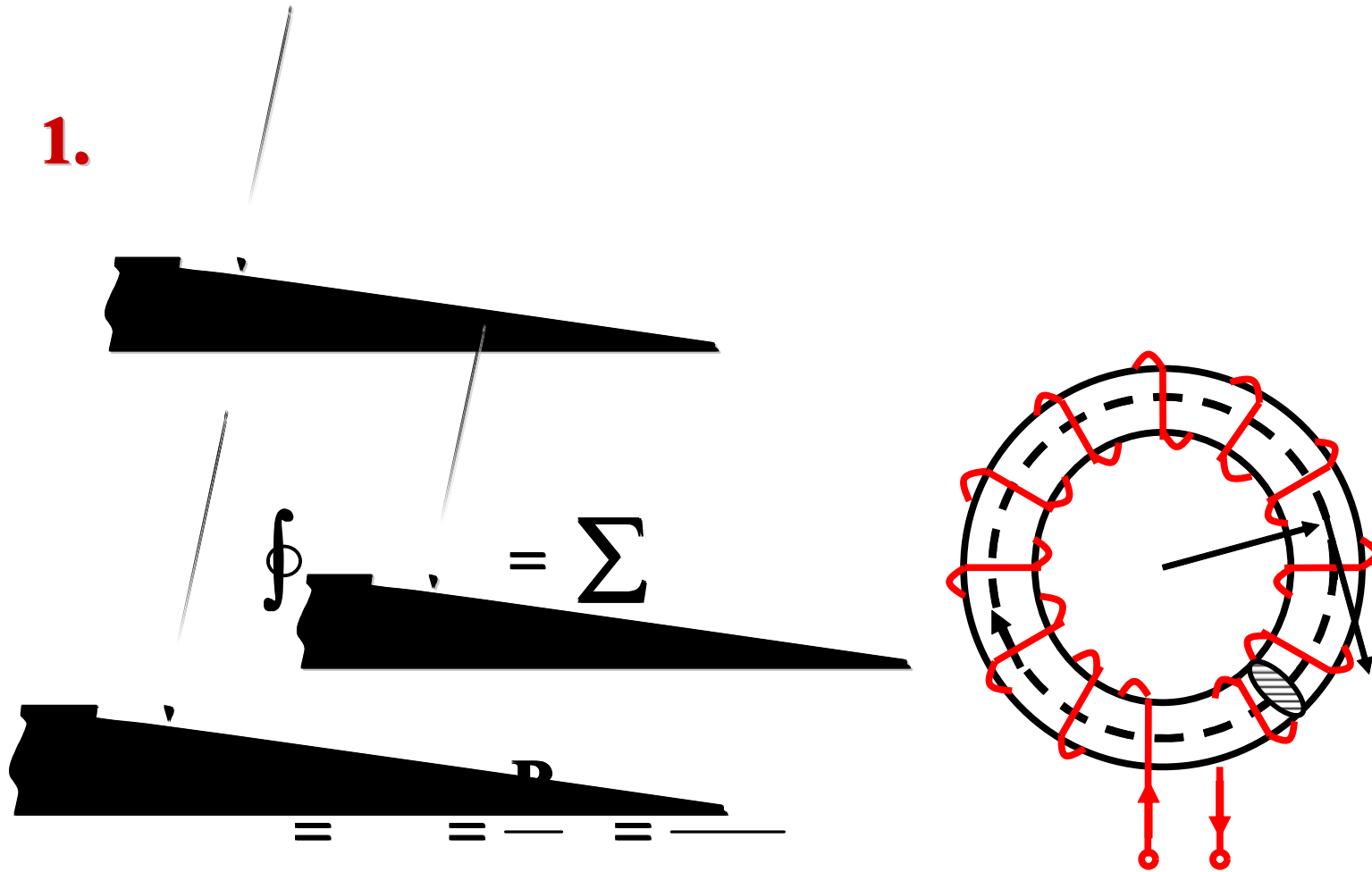
(2)

(3)

6.1.3

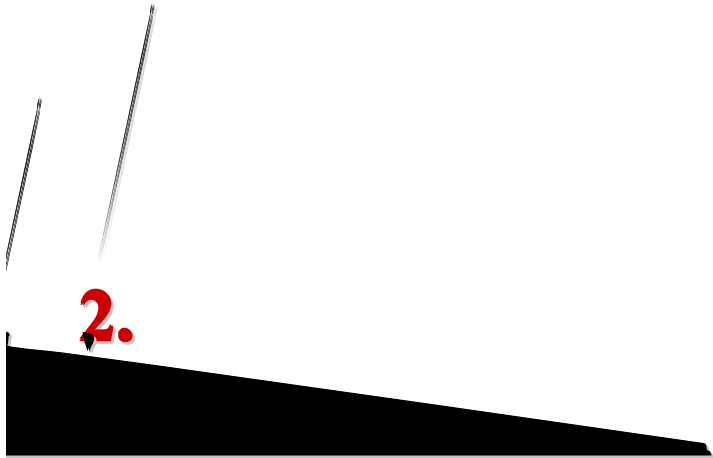


1.





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



3.



) :



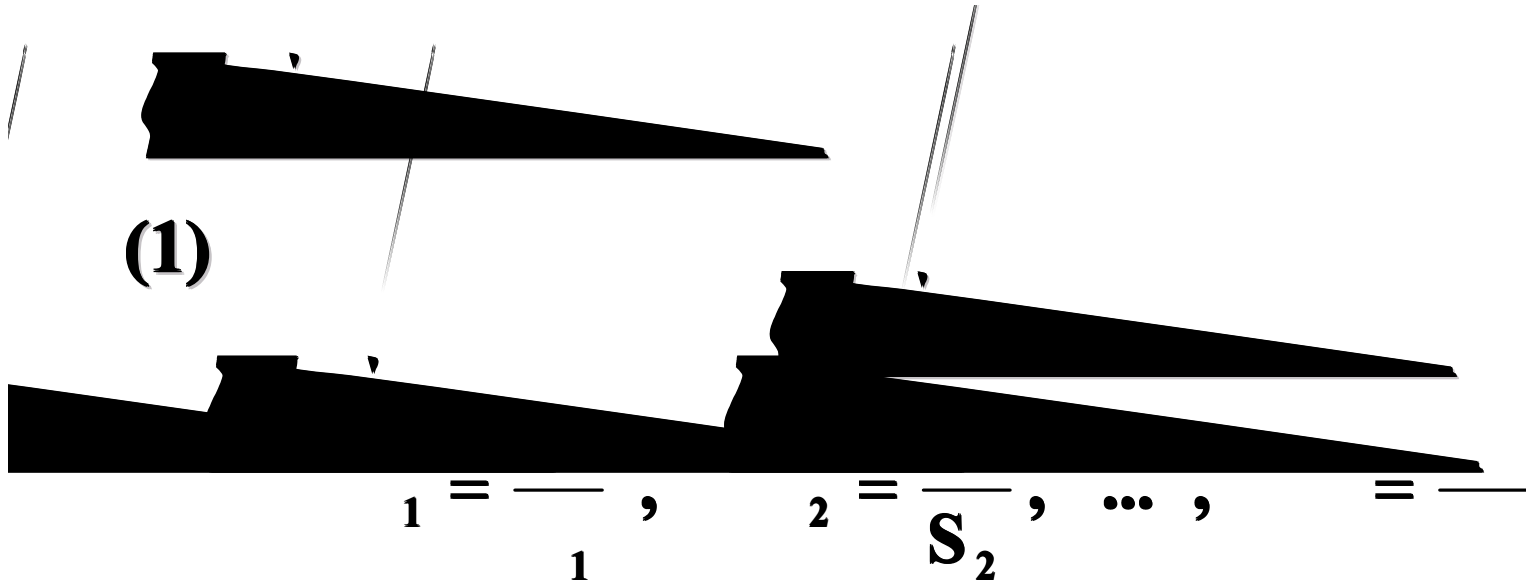
(,

:

$$= 1 \cdot 1 + 2 \cdot 2 + \dots +$$

$$= \sum_{n=1}^{\infty} n^2$$

$$1^2 + 2^2 + \dots$$



(2)

(), 1

2

1

2

(3)

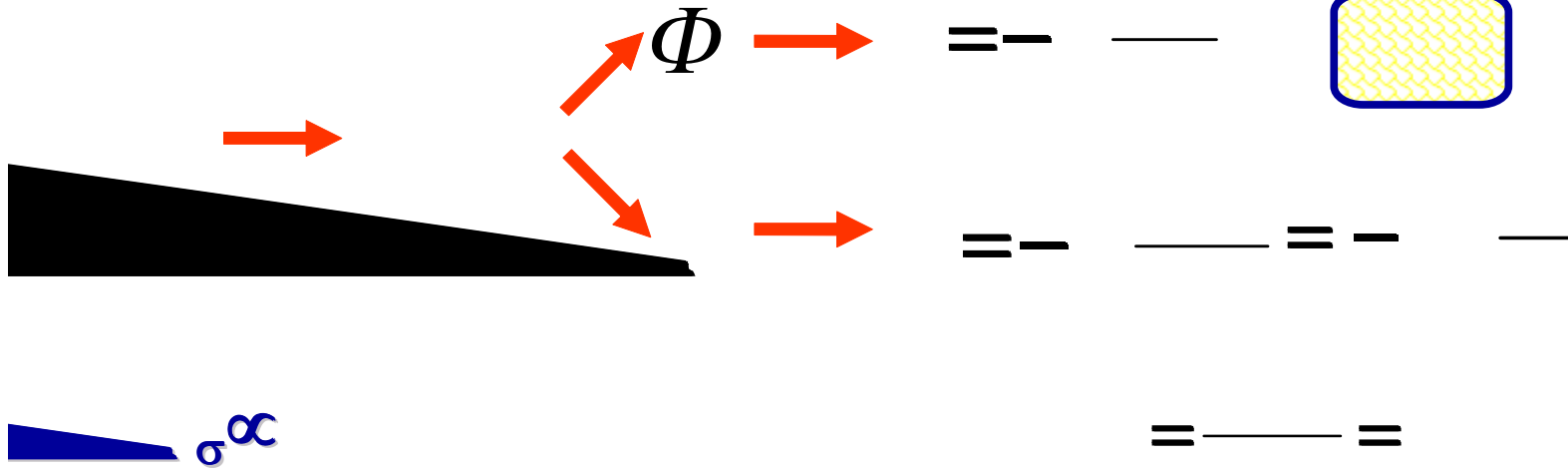
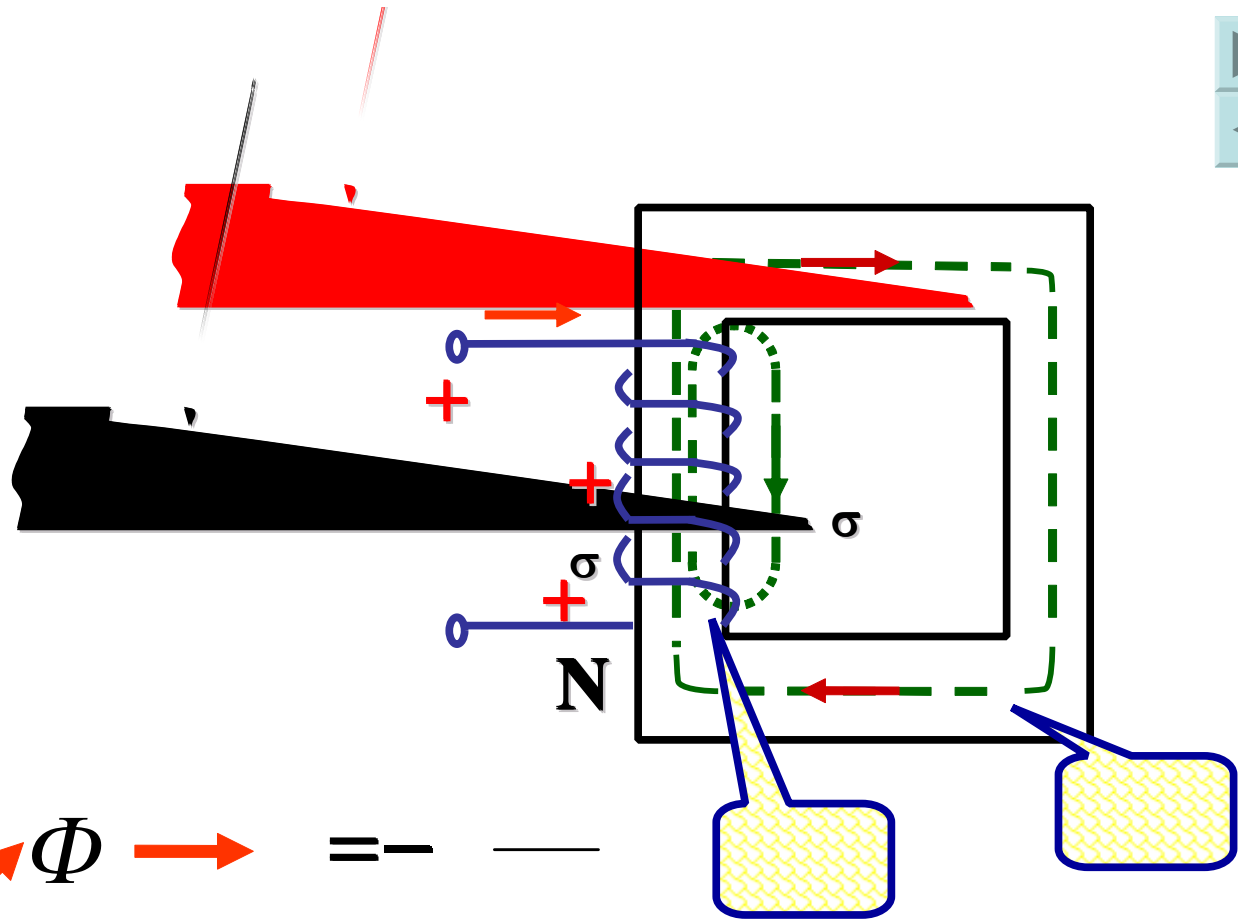
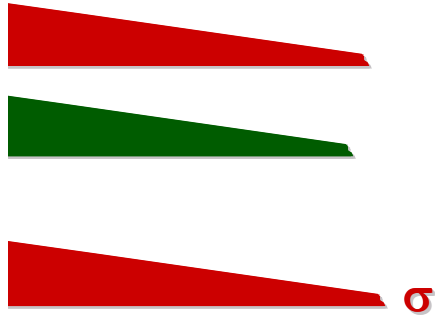
(4)

$$= \sum_{=1}$$



6.2

6.2.1



6.2.2

KVL:

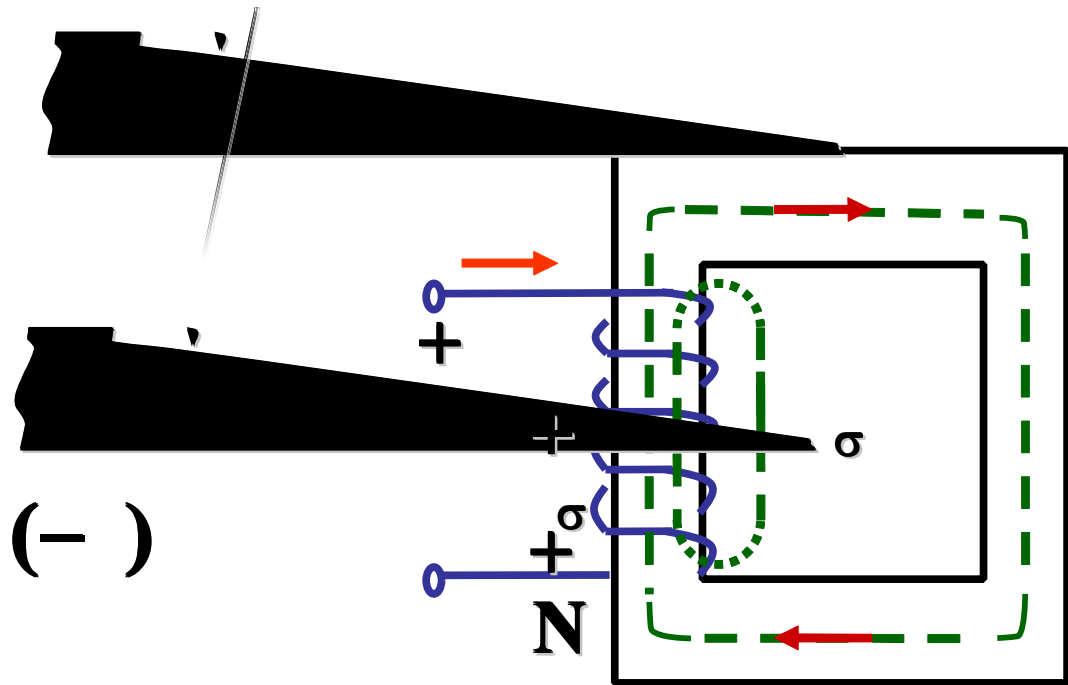
$$= - -$$

$$= + - + (-)$$

σ

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

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

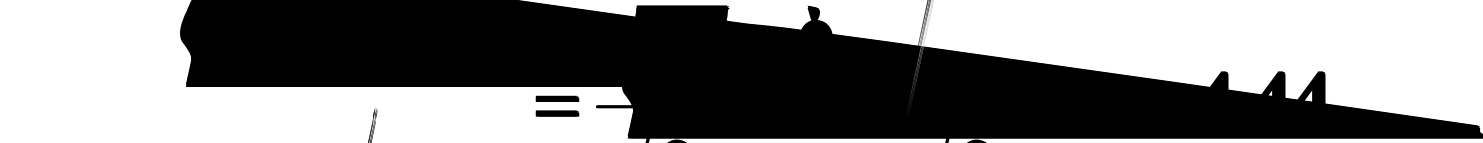




$$\dot{c} = \dot{c}_1 + \dot{c}_2 + (-\dot{c}_3)$$



$$c = \sqrt{2} \cdot \sqrt{2} \cdot (-90^\circ) = \sqrt{2} \cdot \sqrt{2} \cdot (-90^\circ)$$



$$= \sqrt{2} \cdot \sqrt{2}$$



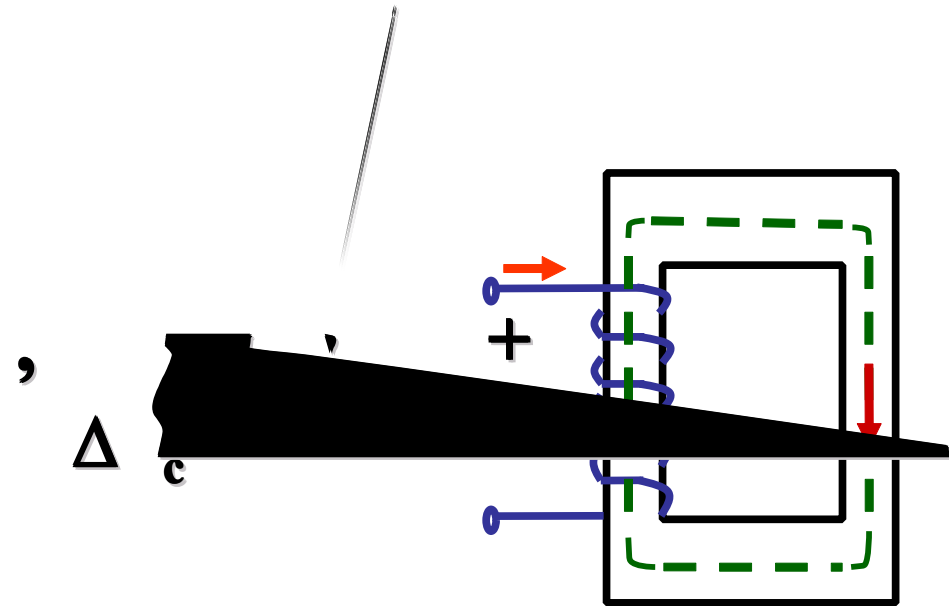
$$\approx -4.44 = 4.44 \text{ (V) [T]}$$

6.2.3



1. (Δ_c)

$$\Delta_c = 2$$

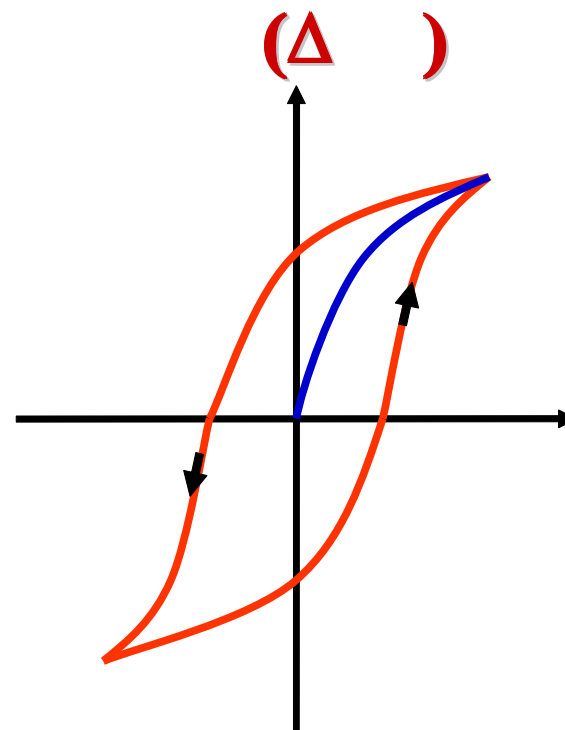


2. (Δ_F)

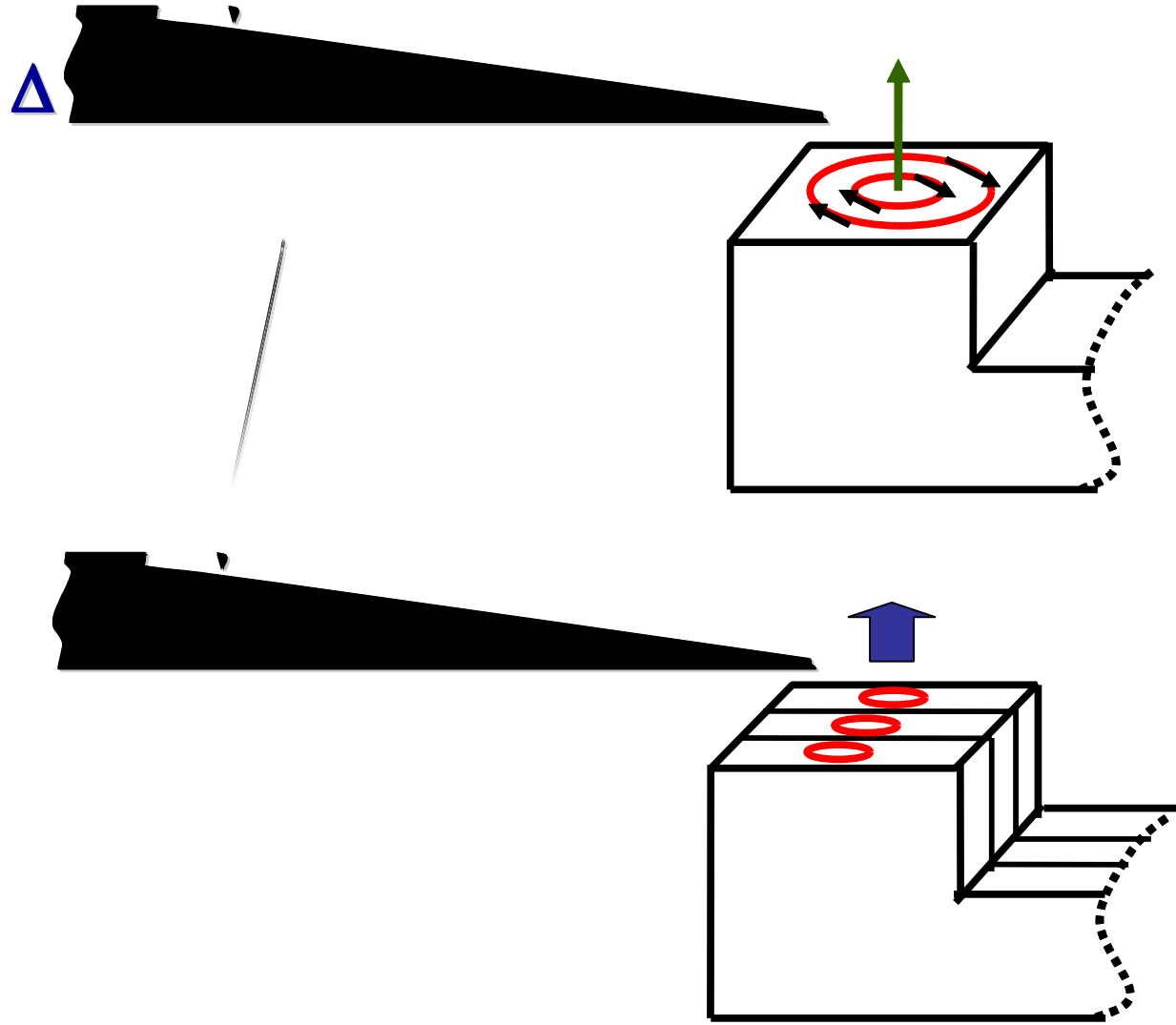
$$\Delta_F$$

1

Δ



(2)



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

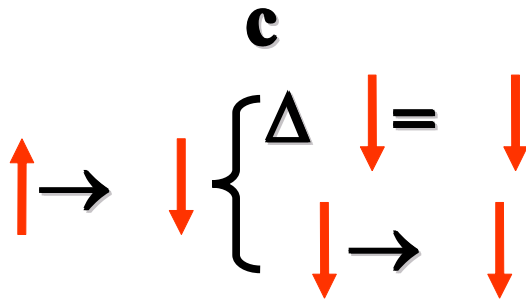


6.3

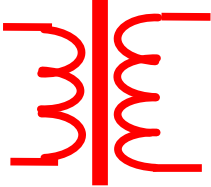
6.3.1

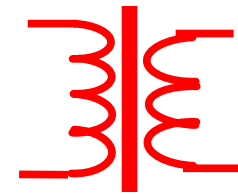


= **c**

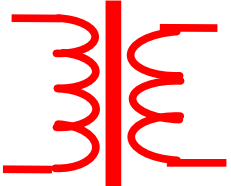


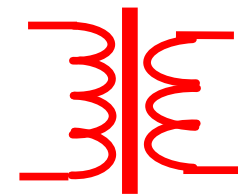


10.5kV  220kV



10kV 

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



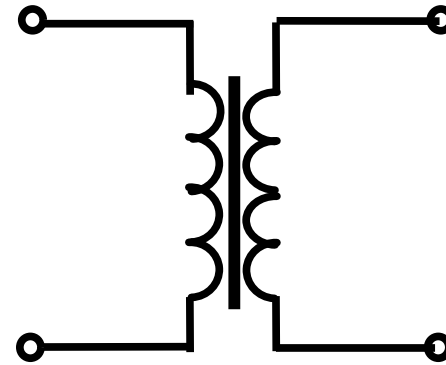
36V

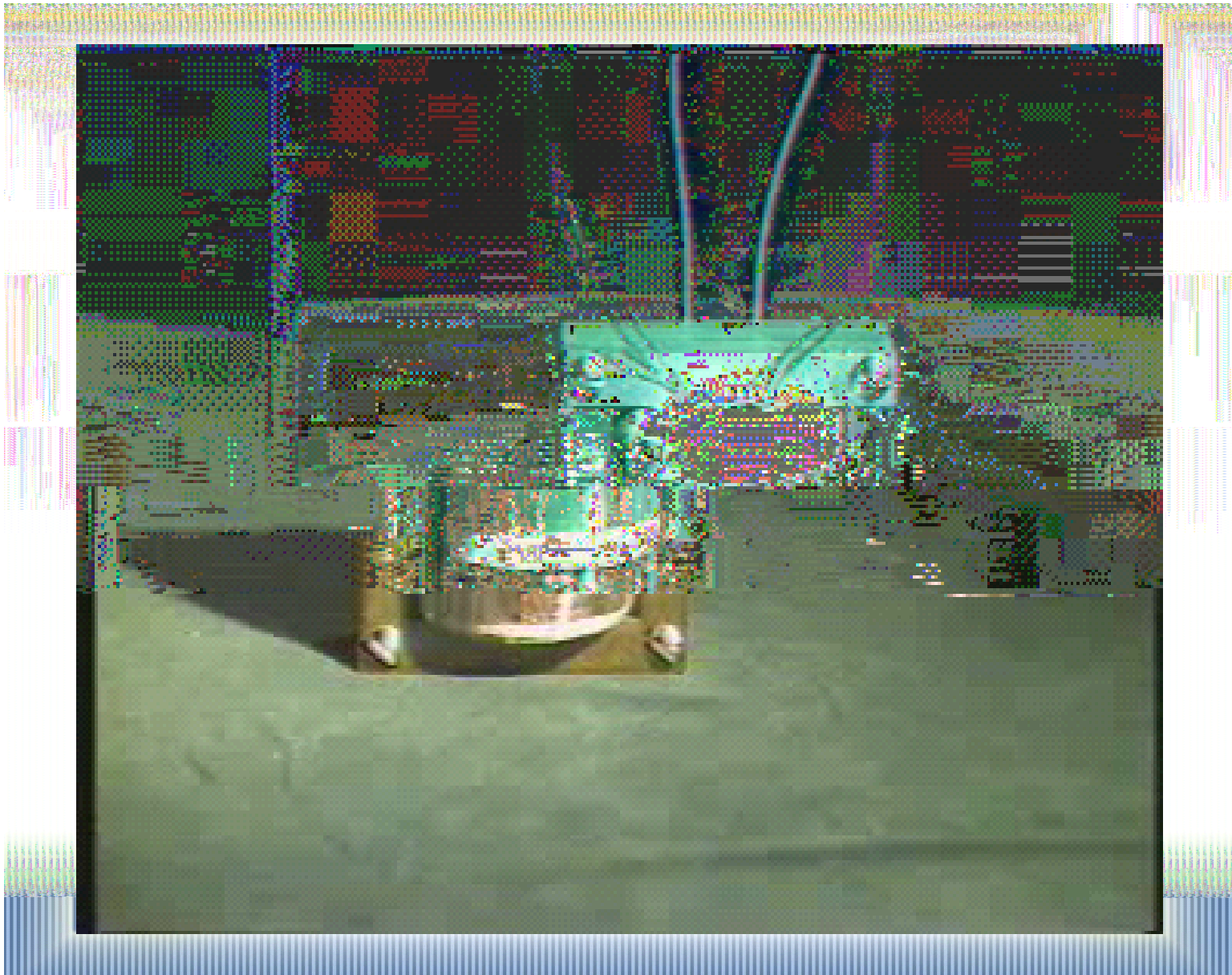


1.

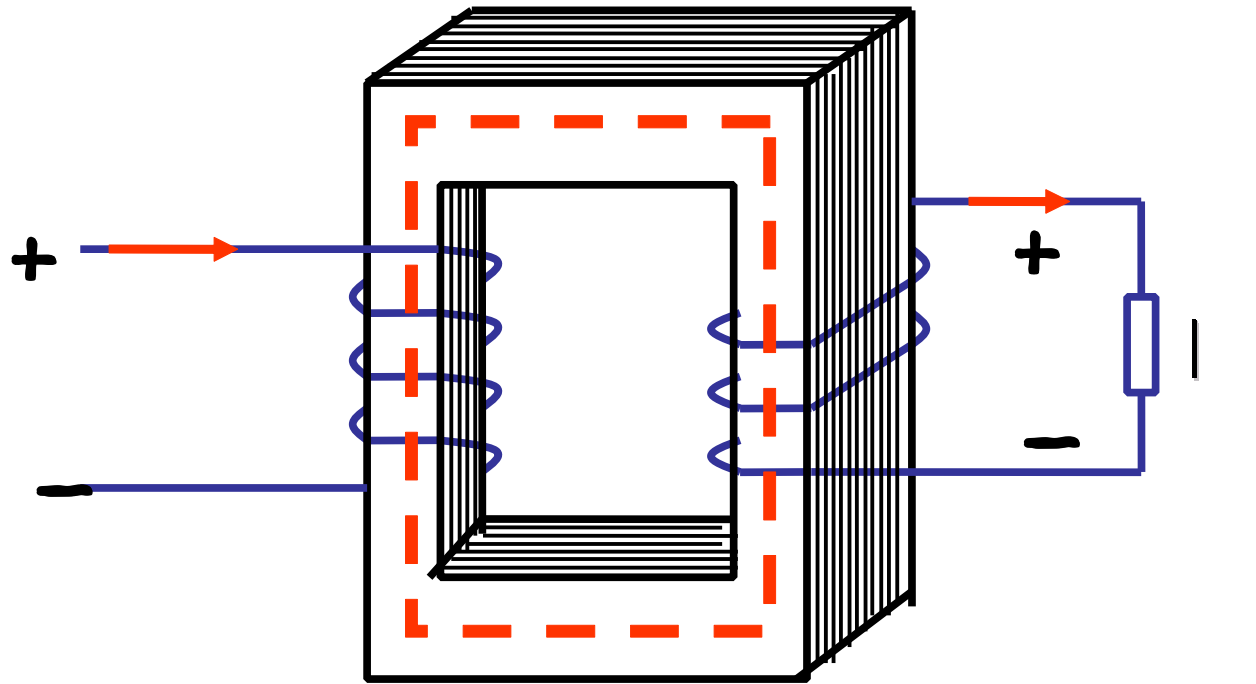


()





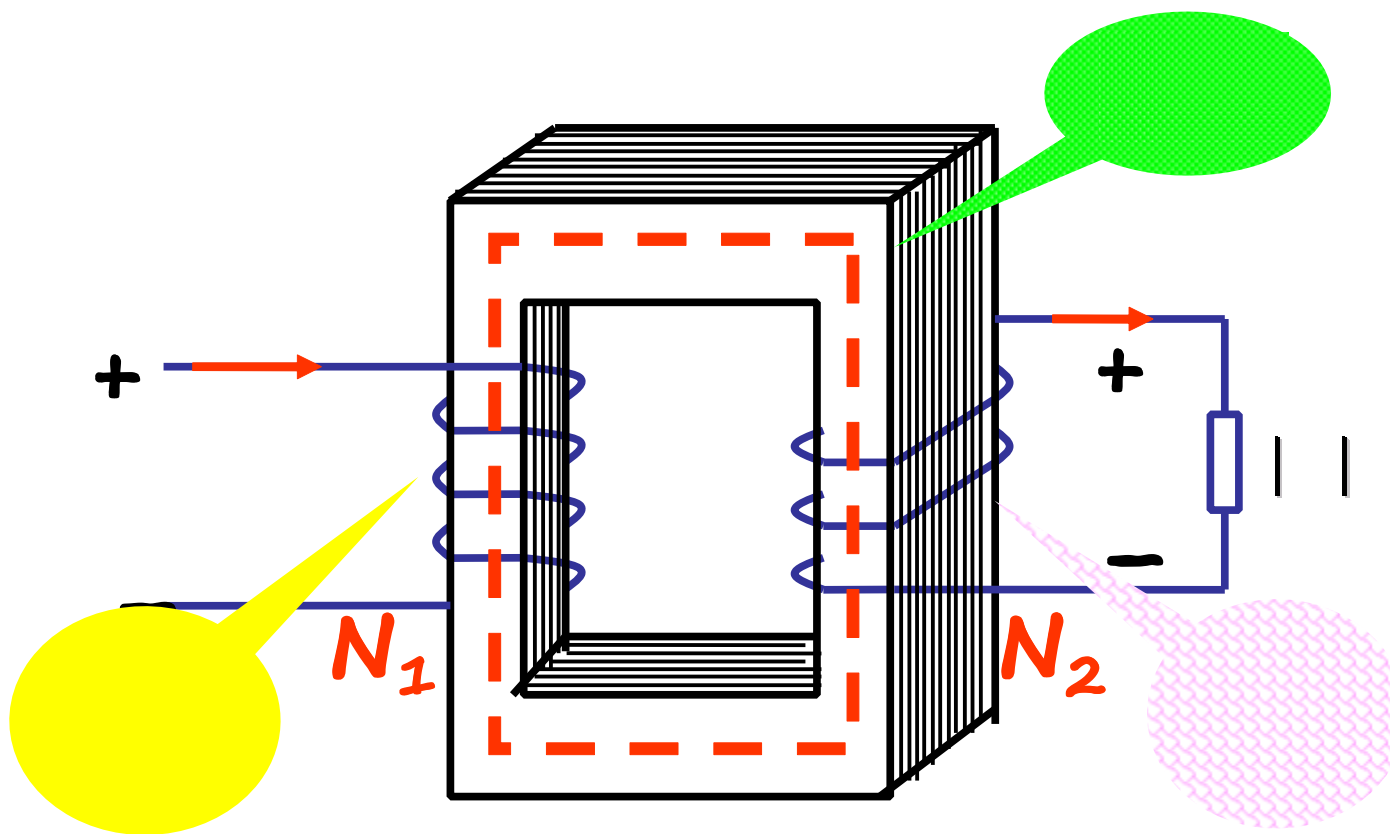
2.



0.35mm

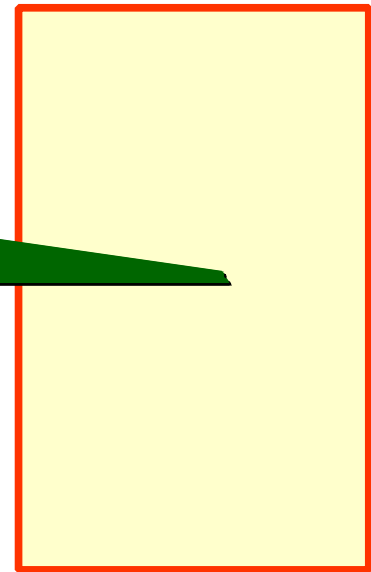
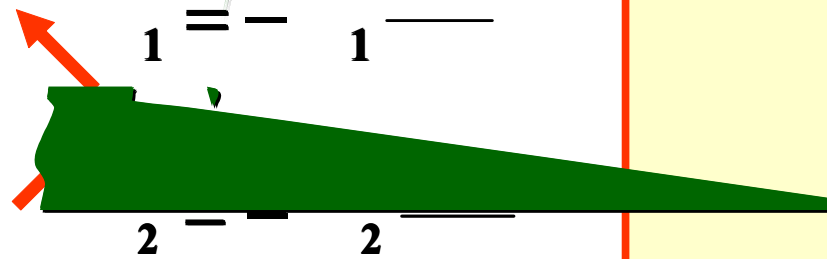
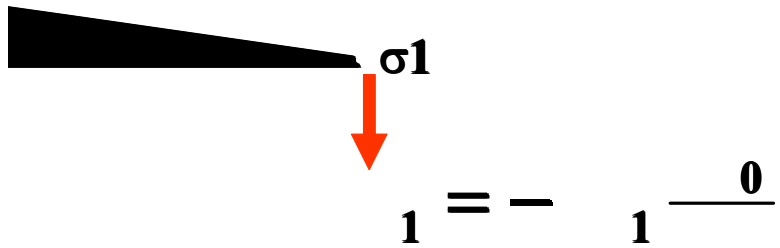
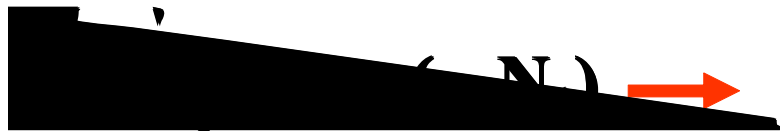
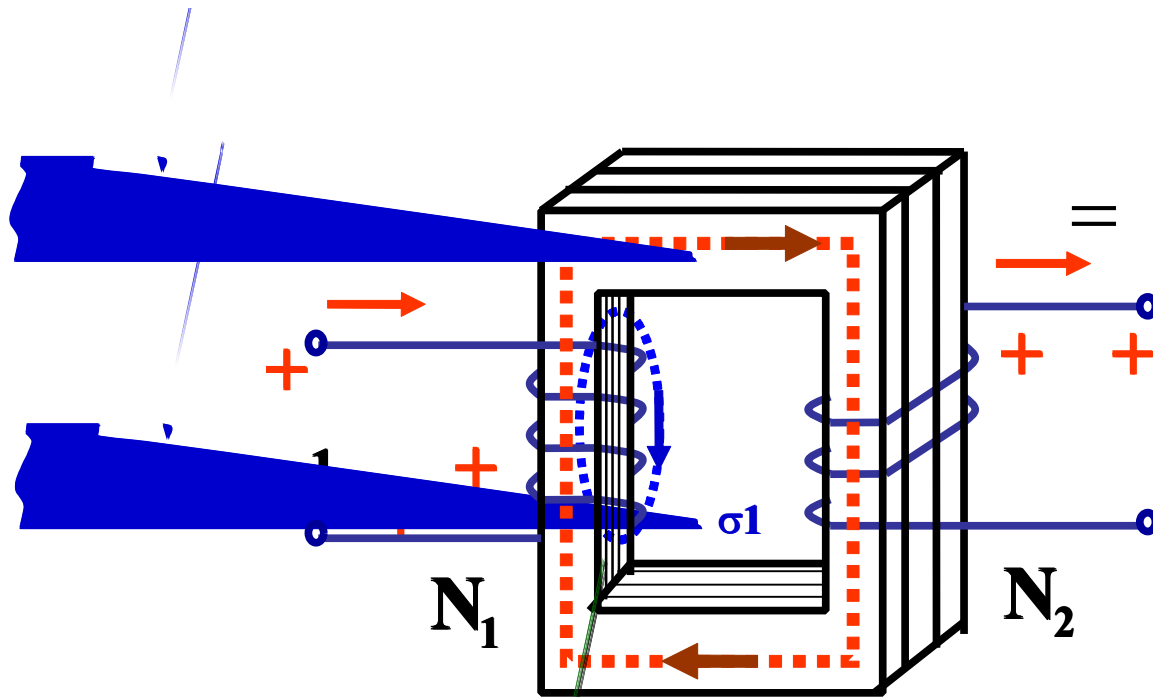
0.5mm

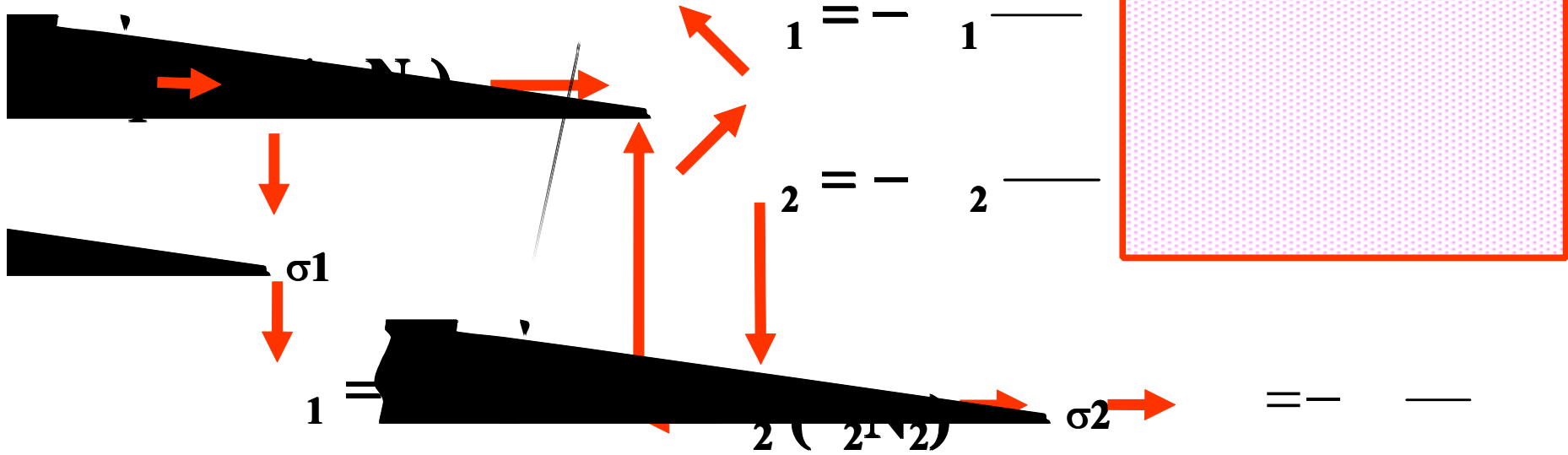
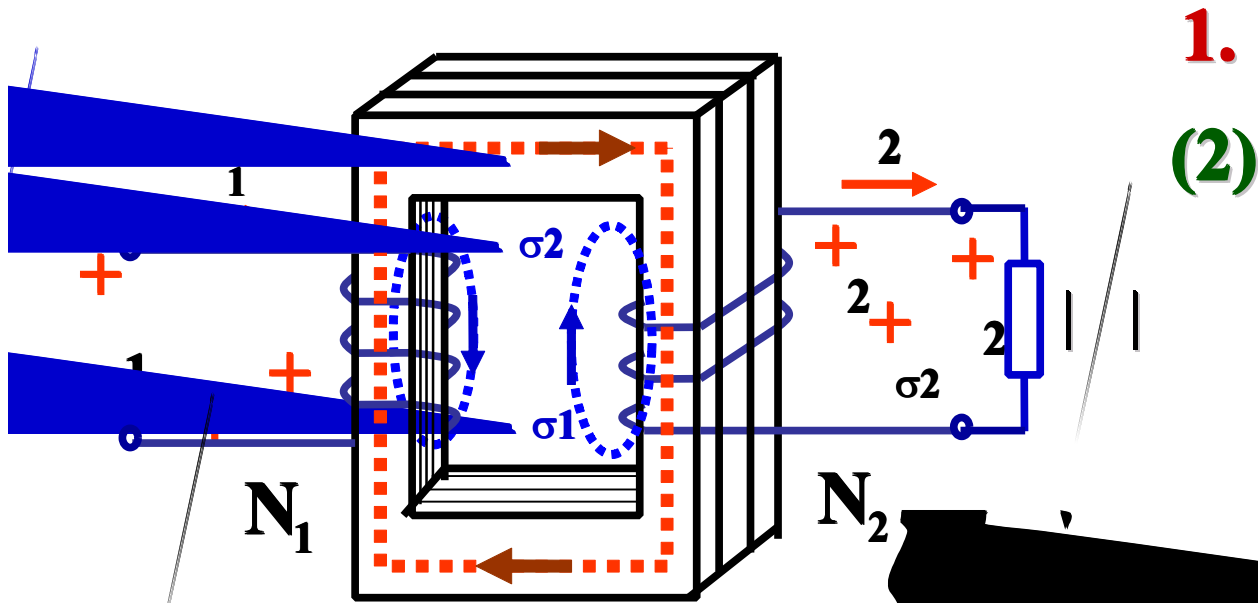
6.3.2





1.
(1)







2.

(1)

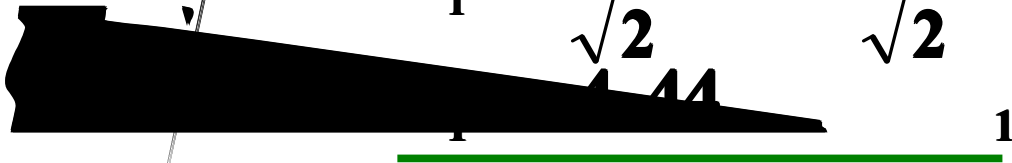
$$\Phi = \Phi$$

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



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

$$\therefore 1 = \frac{1}{\sqrt{2}} = \frac{2}{\sqrt{2}} \Phi$$



$$2 = 2 \quad (-90^\circ)$$

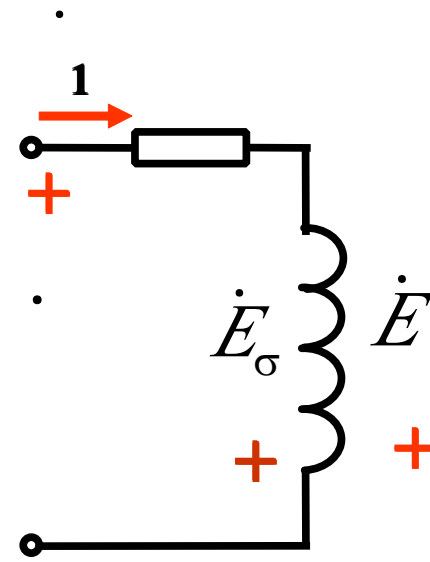


(2)

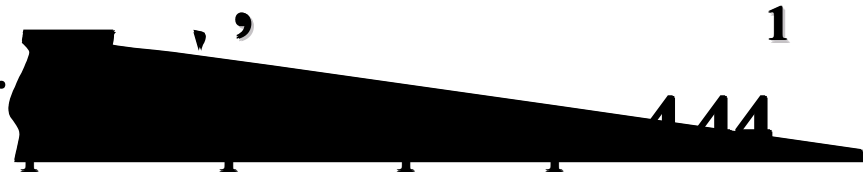


KVL

$$\begin{aligned}
 \dot{U}_1 &= \dot{U}_R - \dot{U}_E \\
 &= \dot{U}_R + \dot{U}_E
 \end{aligned}$$



$$\dot{U}_1 = \dot{U}_R + \dot{U}_E$$



KVL



2

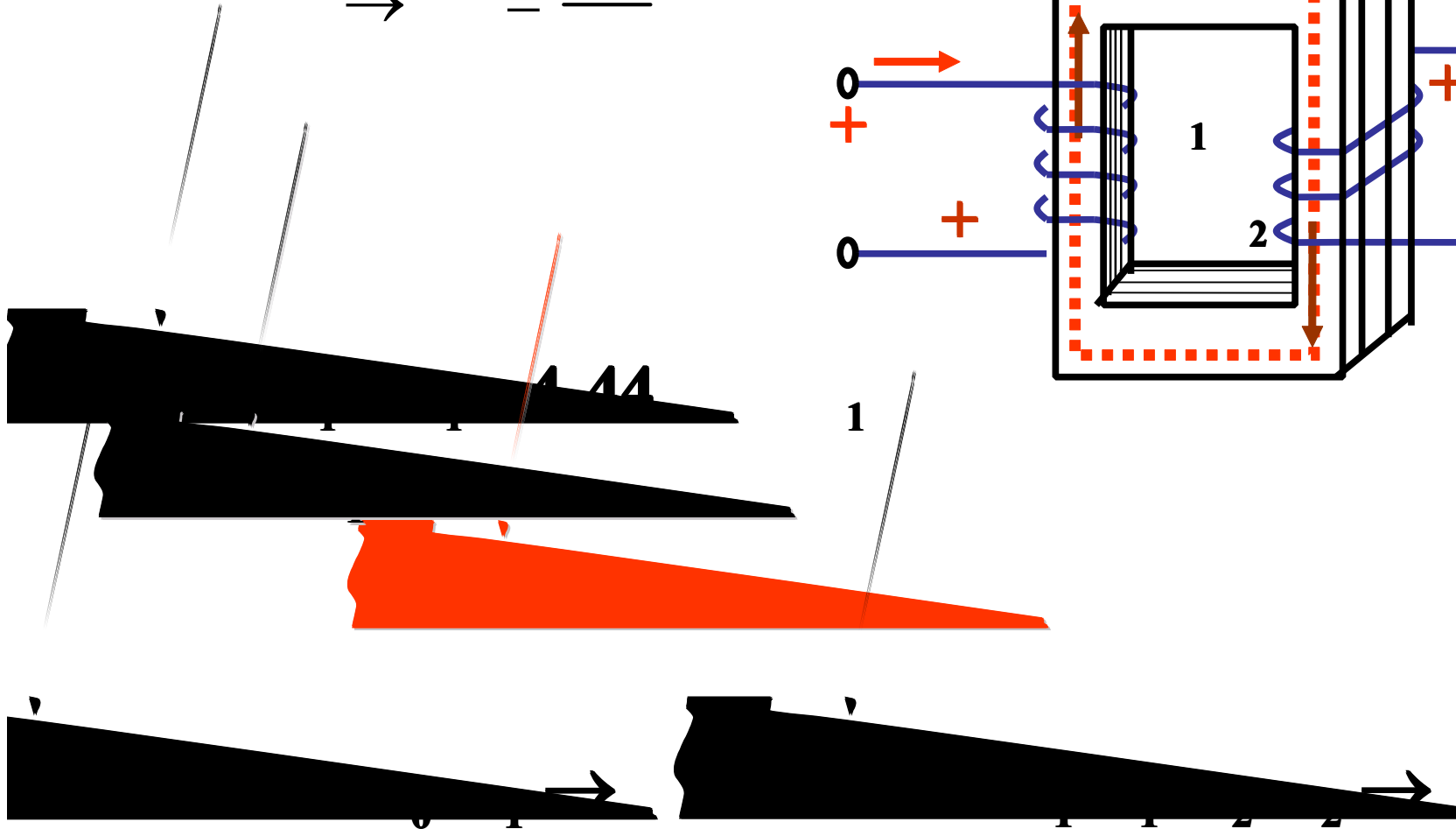
$$\text{---} \approx \frac{E}{E} = \text{---} =$$

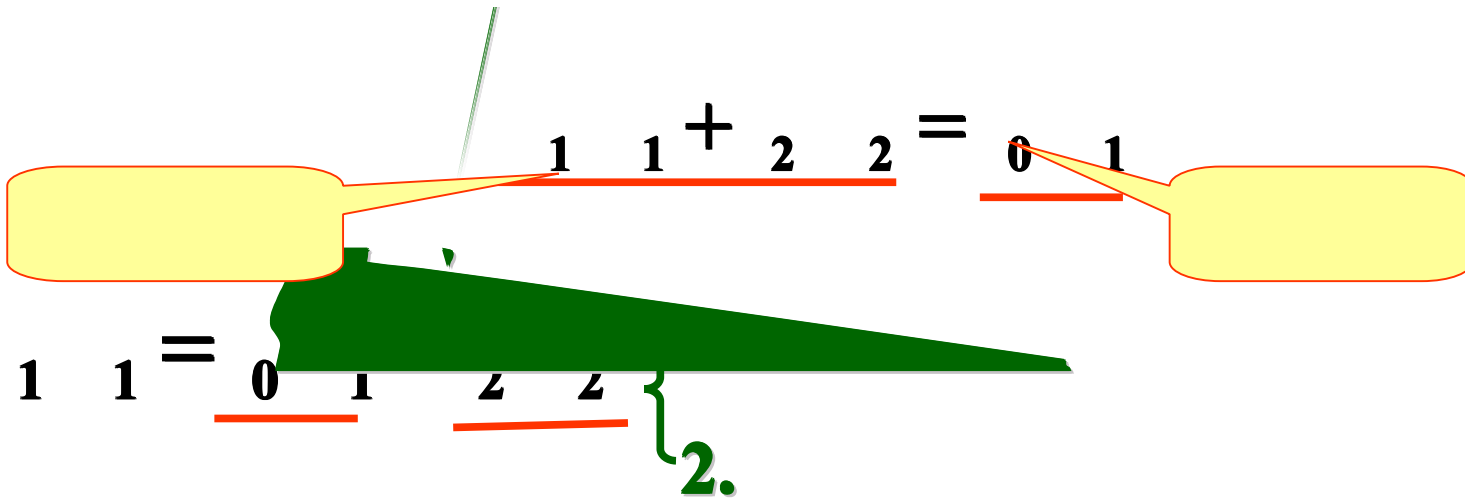


3.

()

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



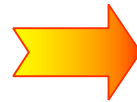


$$0 \approx (2 \ 3) \% \ 1N$$

$$1 \ 1 \approx - \ 2 \ 2$$

$$1 \ 1 \approx - \ 2 \ 2$$

$$1 \ 1 \approx 2 \ 2$$

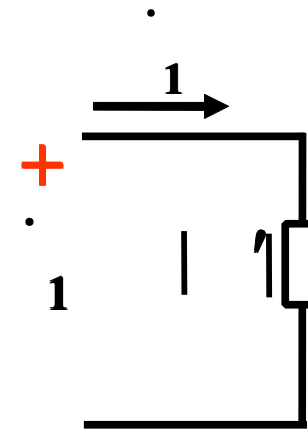
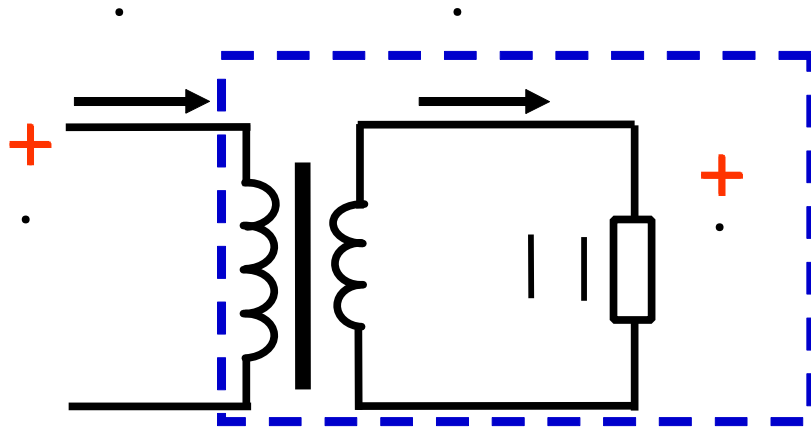


$$\text{---} \approx \text{---} = \text{---}$$





4.



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

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

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

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



1:

= 120V

$\omega_0 = 800$

Ω

= 8 Ω

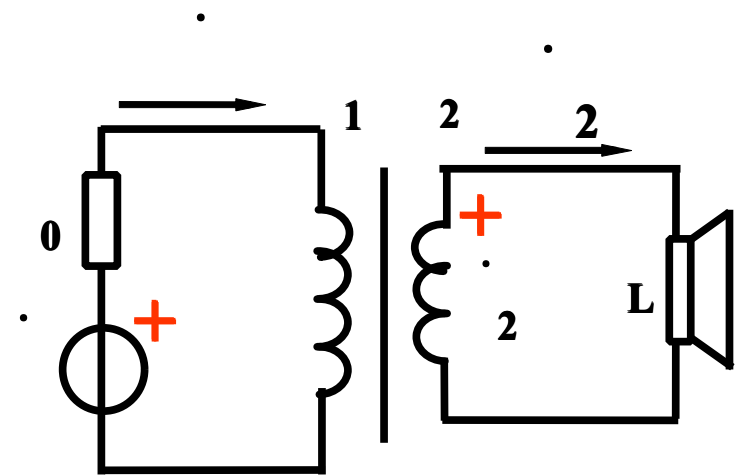
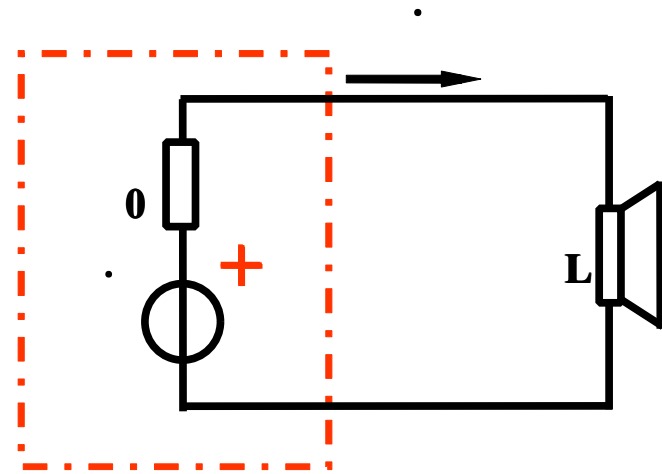
: (1) , L
=

2

,

: (1)

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





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

2

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

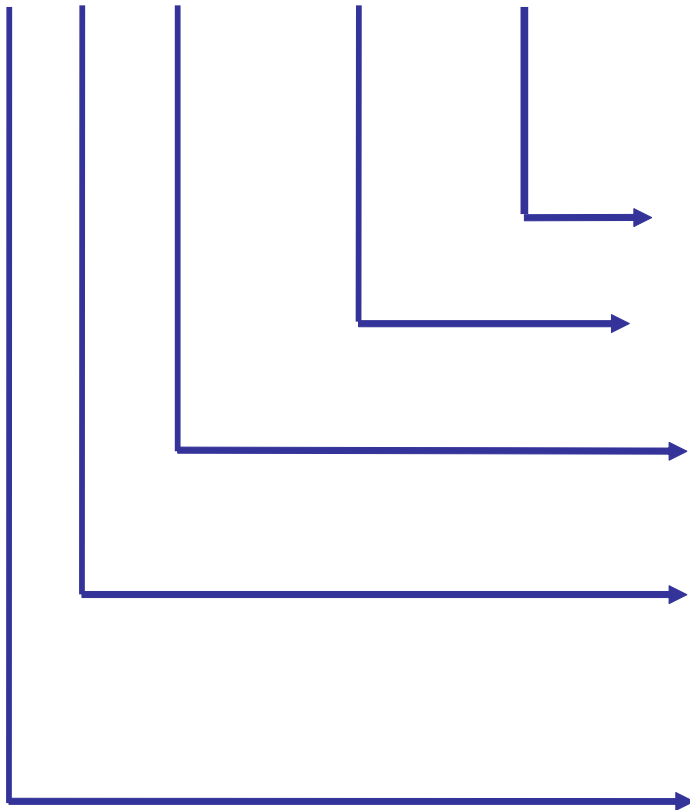
$$\underline{\underline{I_L = 0}}$$



5.

1)

S J L —1000/10



(V)

(VA)

**{ J:
F:**

**{ S:
D:**

2)



1N **2N**



1N

2N

1N

2N

1N

2N



2)



N

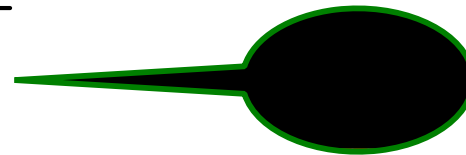
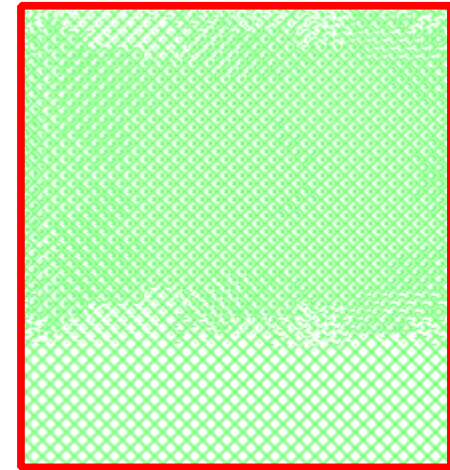


$$\begin{aligned}
 N &= \frac{2N}{2N} \approx \frac{1N}{1N} \\
 N &= \sqrt{3} \frac{2N}{2N} \approx \sqrt{3} \frac{1N}{1N}
 \end{aligned}$$

()



$$\begin{aligned}
 N &= 1N \times 1N \\
 2 &= 2 \times 2^c \\
 1 &= \frac{2}{2}
 \end{aligned}$$



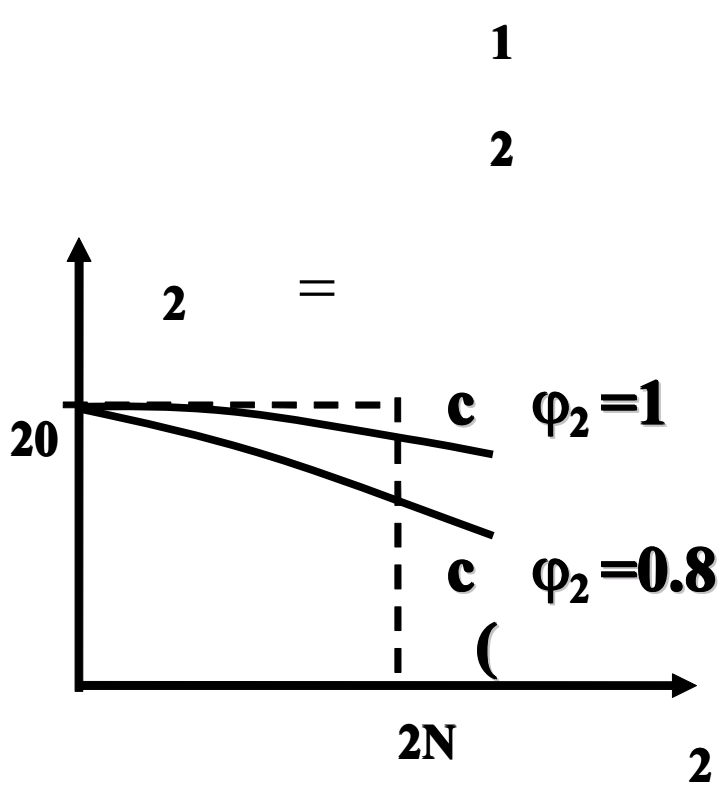
N ≠

1 ≠

2

6.3.3

1.



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



2.

(Δ_C)

(Δ_F)

$$= \frac{2}{1} = \frac{2}{2^+ C^+ F}$$

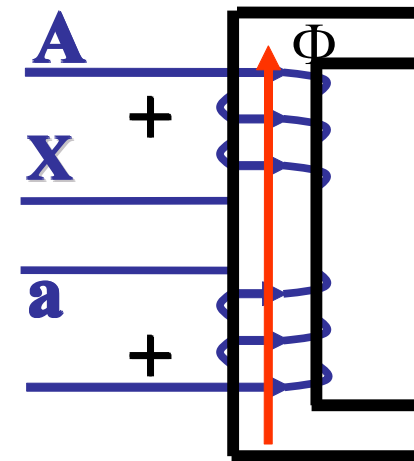
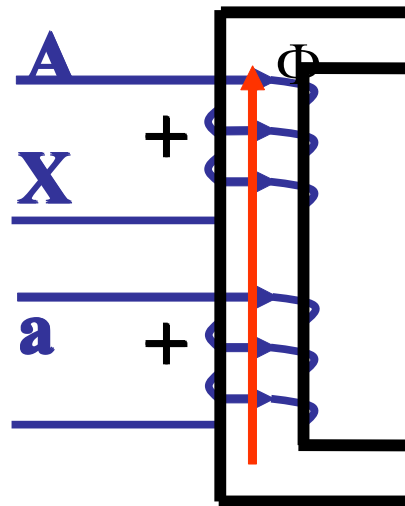
95% ,

(50 75)% ,

6.3.4

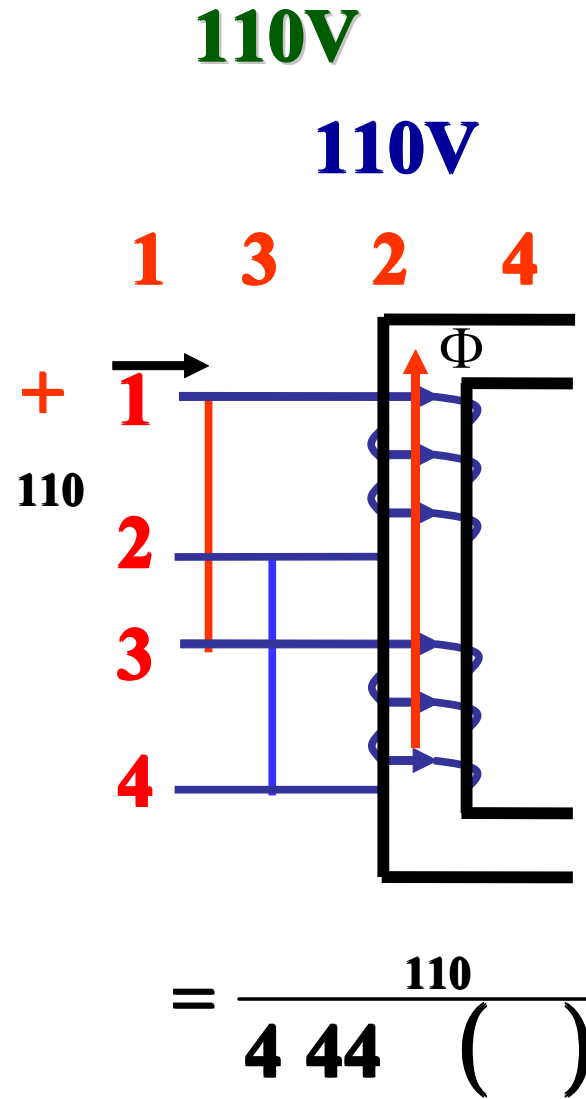
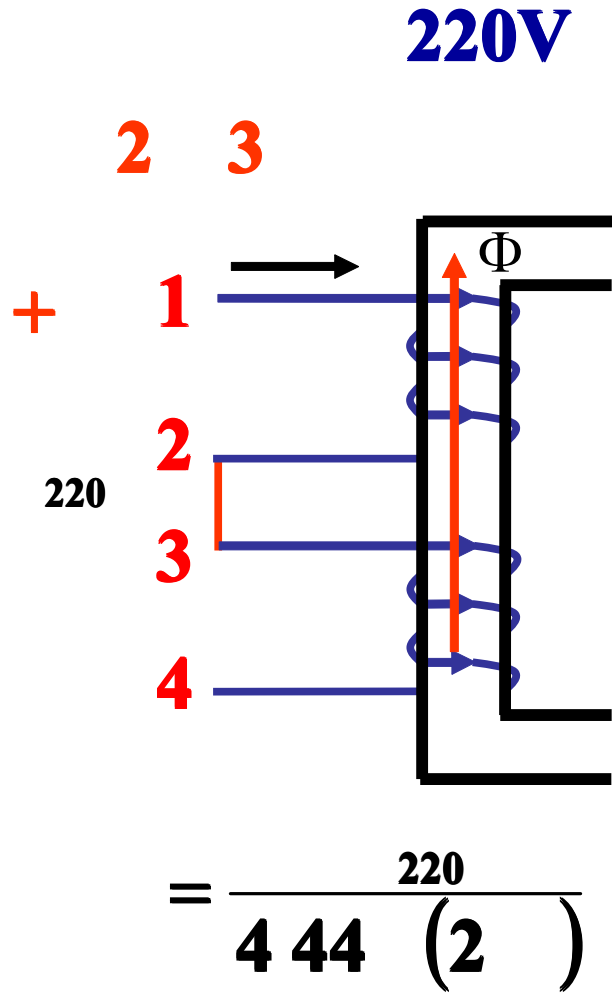
1.

()
(
(





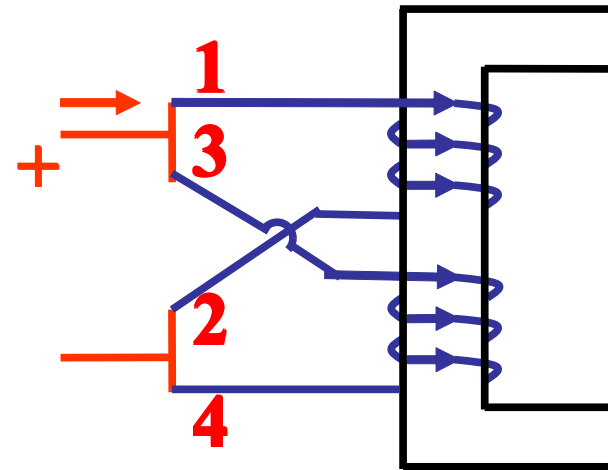
2.



(220/110)



1 **110V**

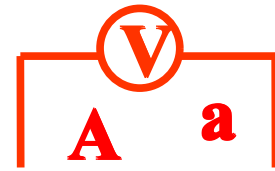


2



$$1 \overset{=}{=} 1 \quad 1 \overset{-}{=} 1$$

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



(X -) ,

AX

AX

AX

Aa

a



A

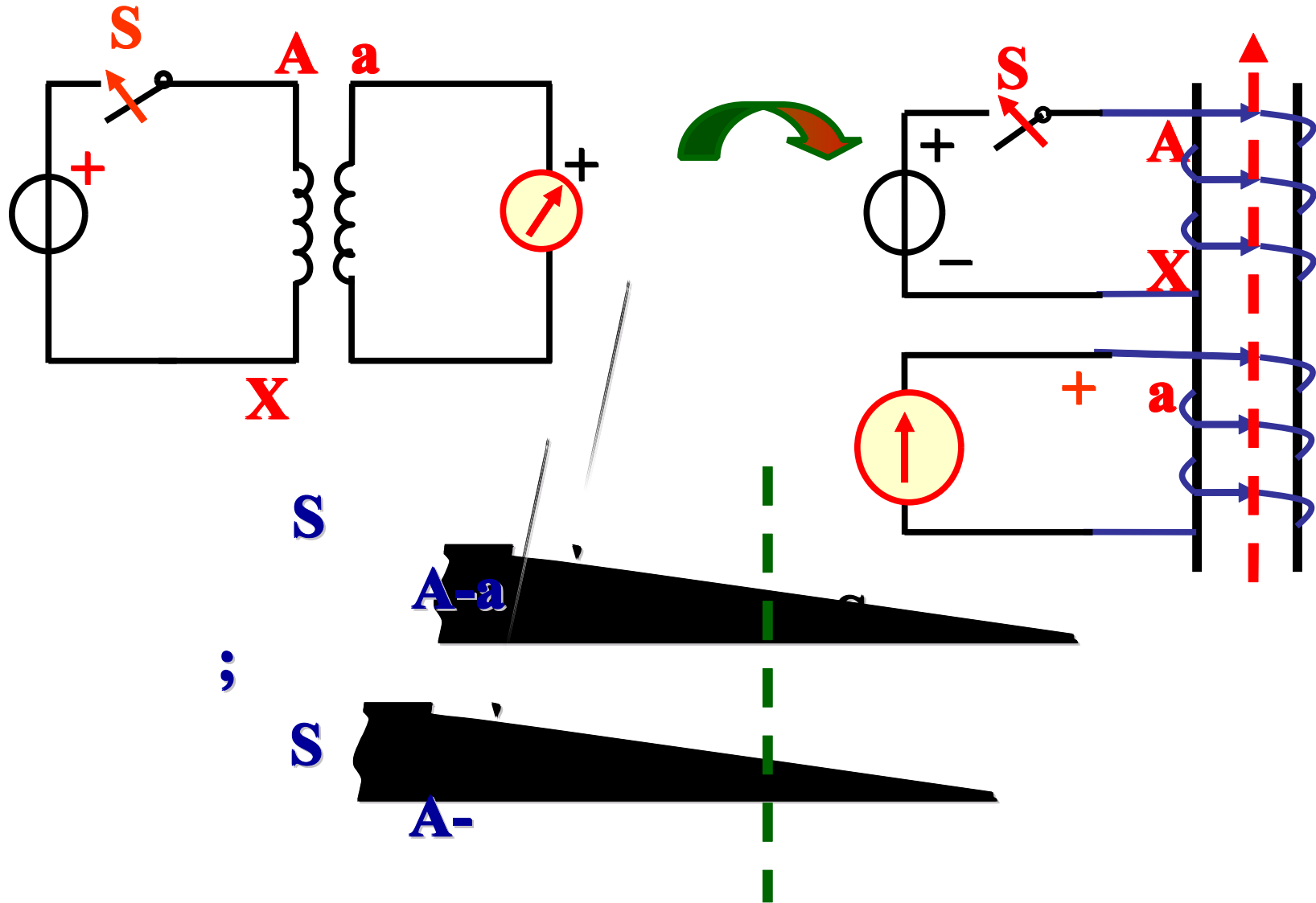
a

X

A

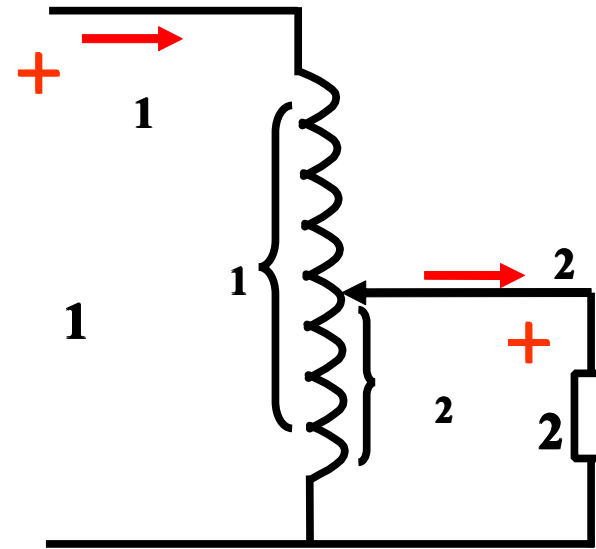
X

a

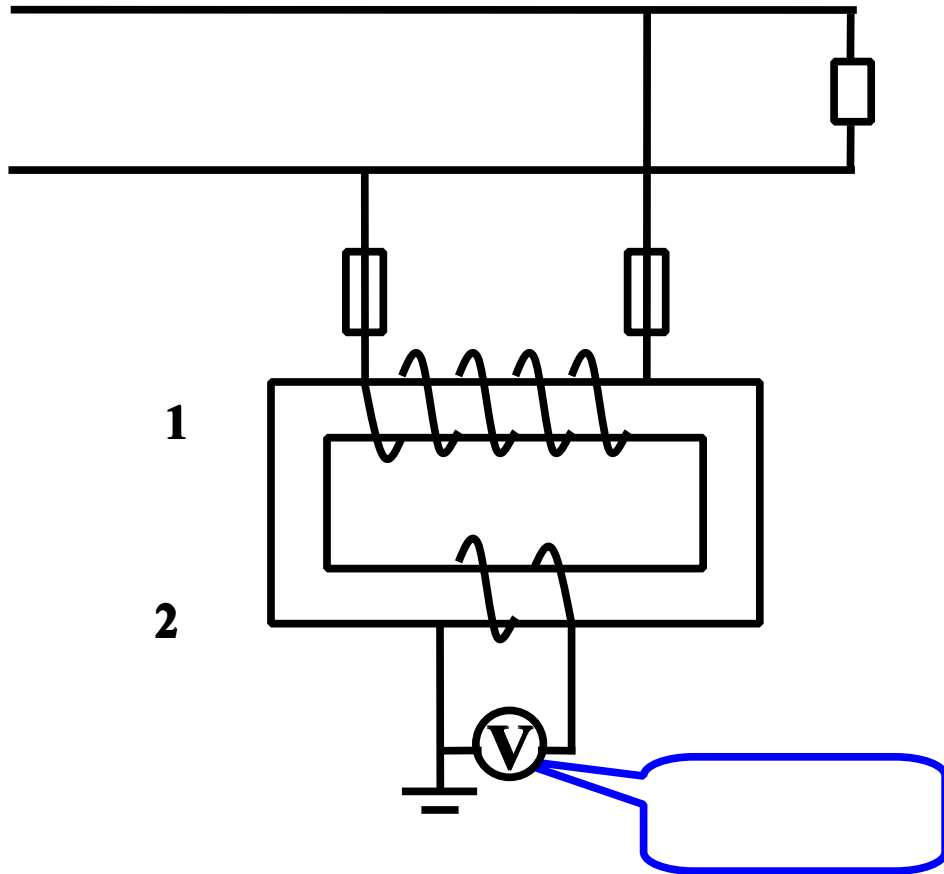


6.3.5

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



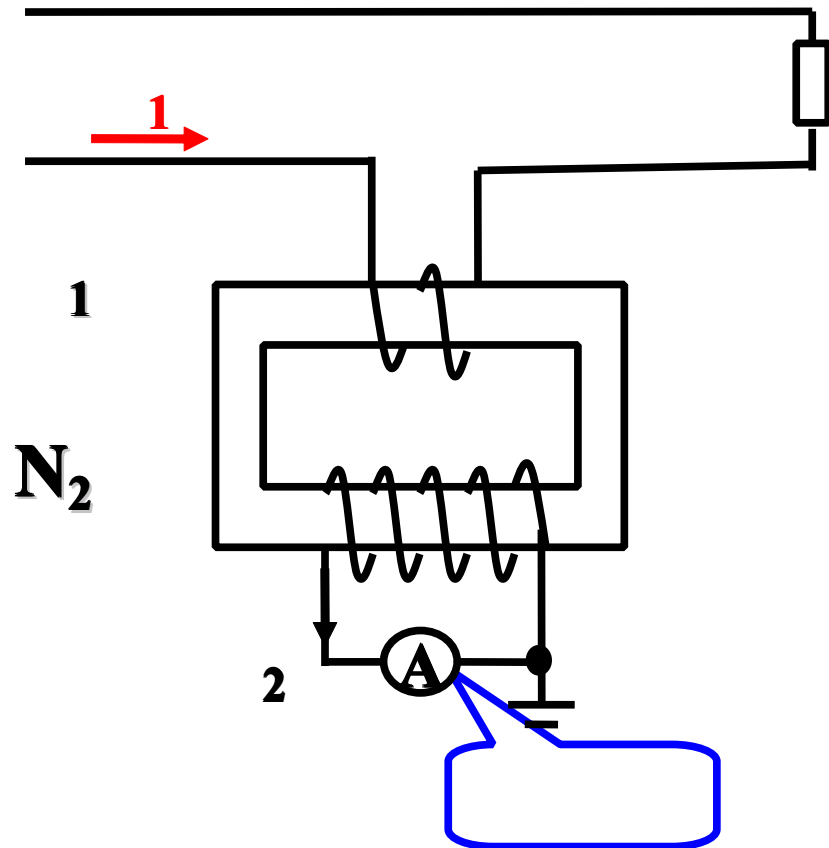
2.



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



3.



1.
2.

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

