



6

6.1

6.2

6.3

***6.4**



6

1.

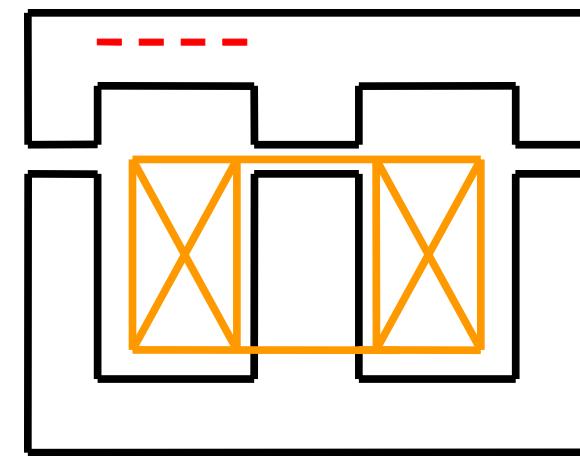
2.

3.

***4.**



6.1





6.1.1

1.

B

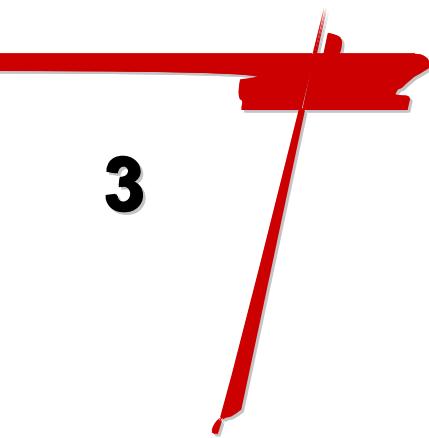
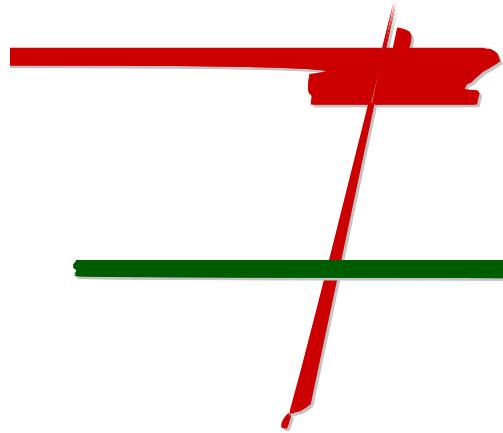
$$B = \frac{F}{$$

$$\vdots \quad (T) \quad 1T = 1Wb/m^2$$

•



2.



:

[](Wb)

$1\text{Wb} = 1\text{T}^2$

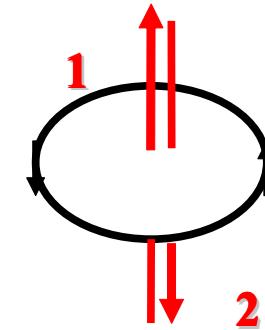
$$[\text{Wb}] = \text{A}^2$$

$$1\text{Wb} = 1\text{T}^2$$

/ A^2



$$\oint \oint H d = \sum (\Sigma)$$



= —



4.

=

$$\text{H} = \frac{\text{Wb m}^2}{\text{A m}} = \frac{\text{H.A}}{\text{A.m}} = \frac{\text{H}}{\text{m}}$$

$$\mu_0 = 4 \times 10^{-7} \text{ H/}$$



r

0

$$= \underline{\hspace{1cm}} = \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

0 0 0

0



6.1.2

1.

>>1 (

2×10^5)

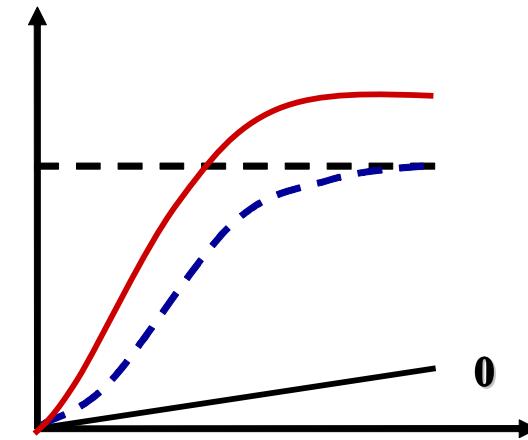
2.



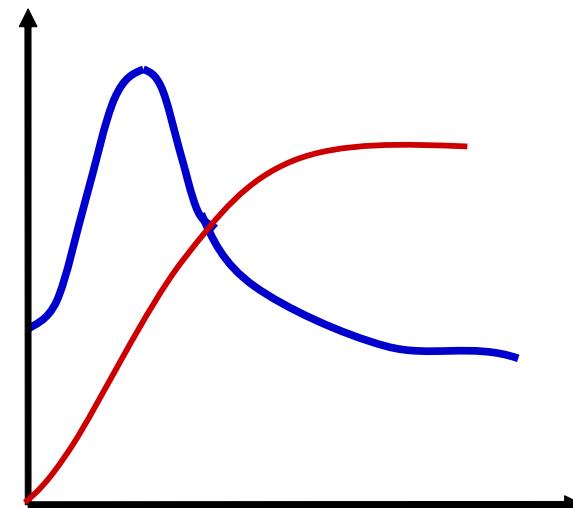
J

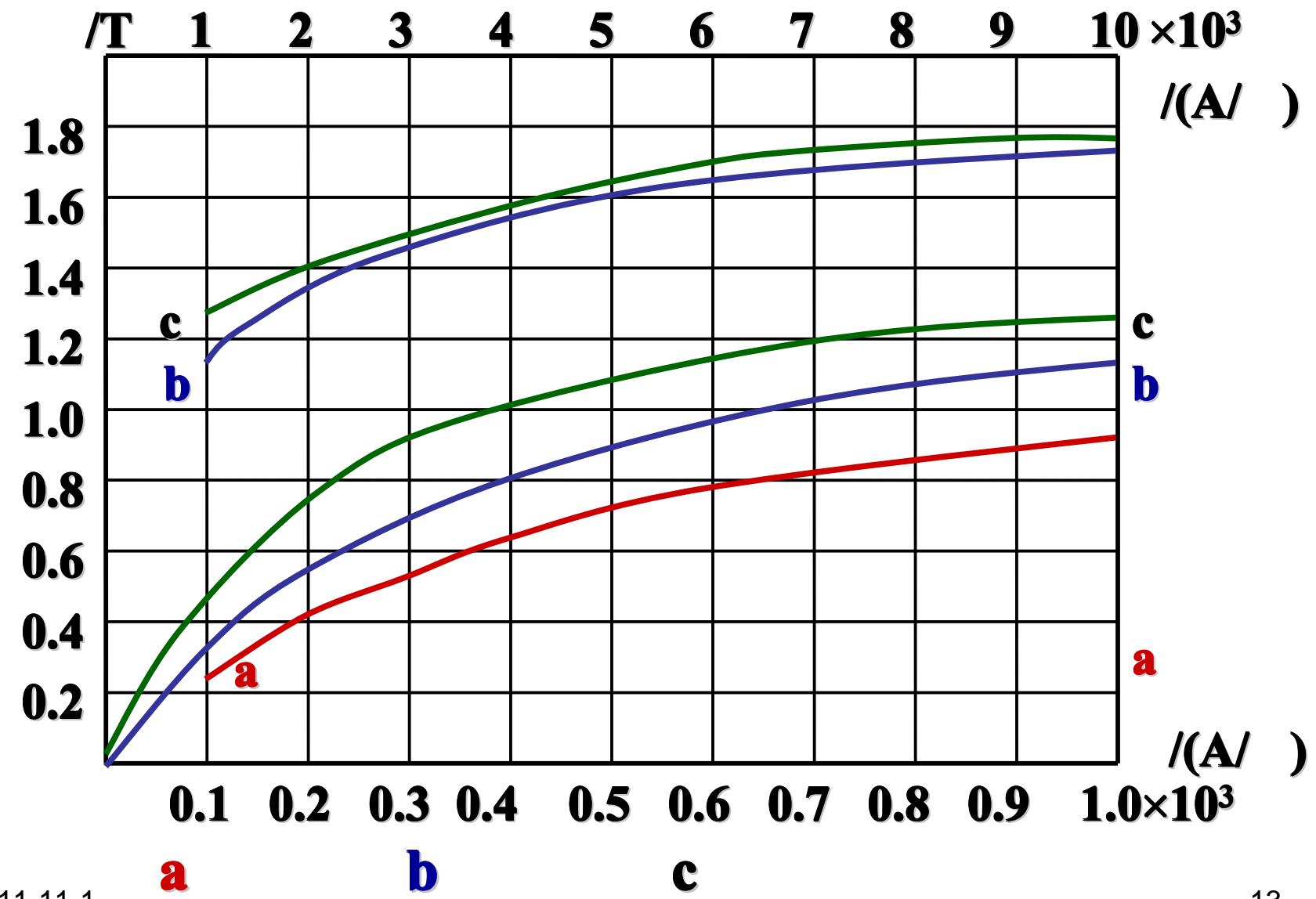
0

J



(Φ)



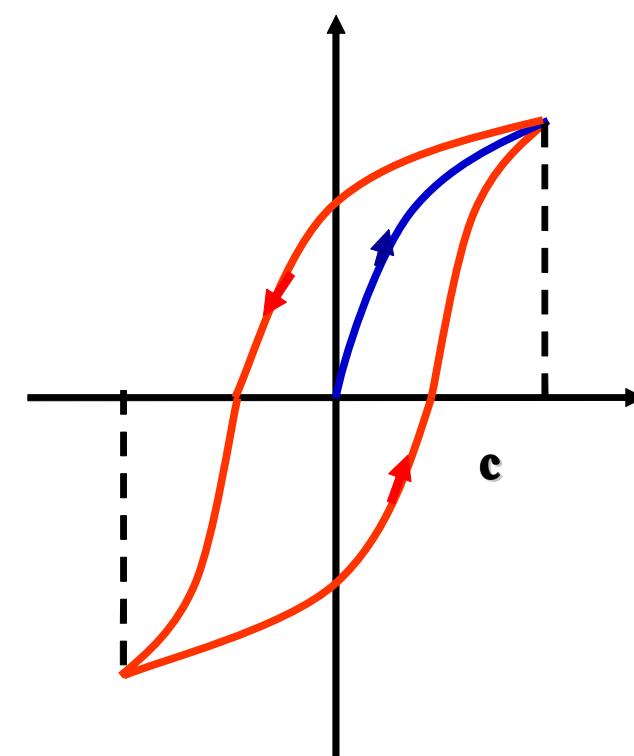


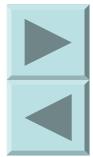
3



$$(=0)$$

:

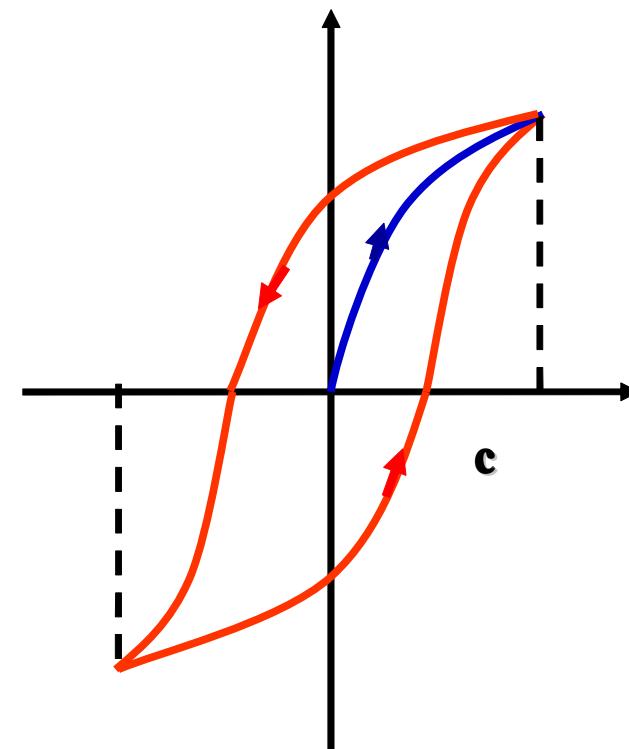


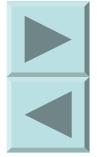


3.

$$= 0$$

c





(1)

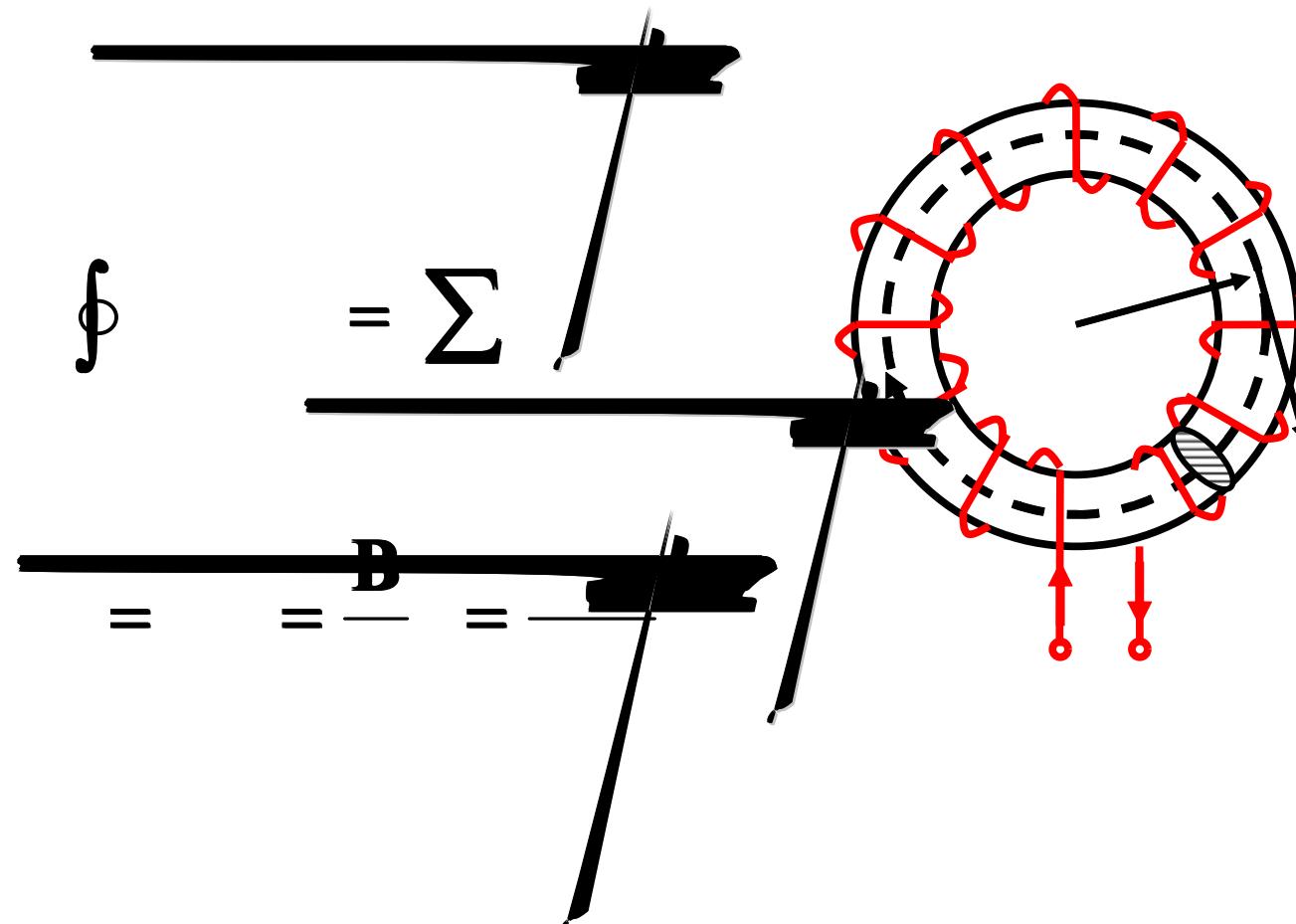
(2)

(3)



6.1.3

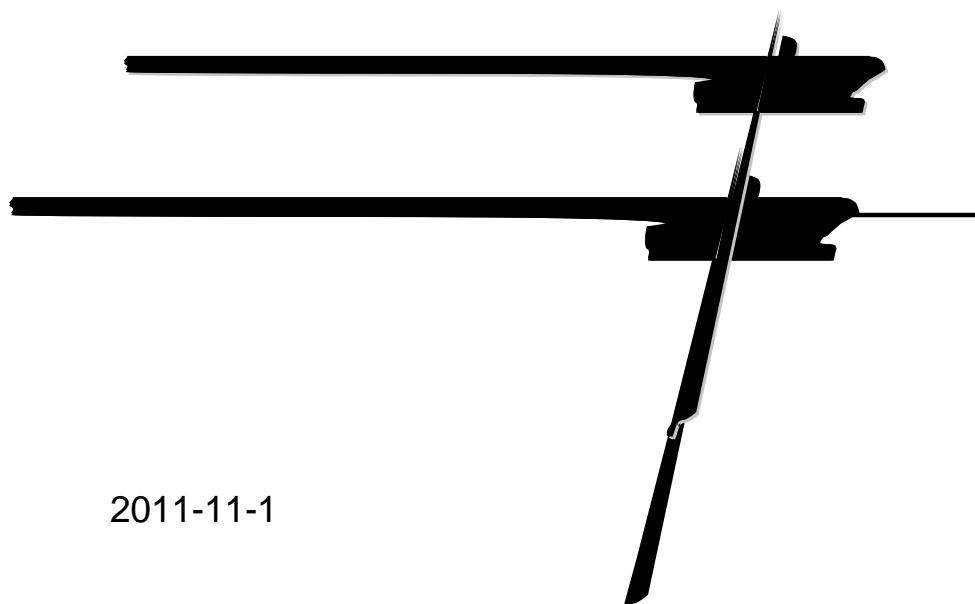
1.





= — = —
—

2.

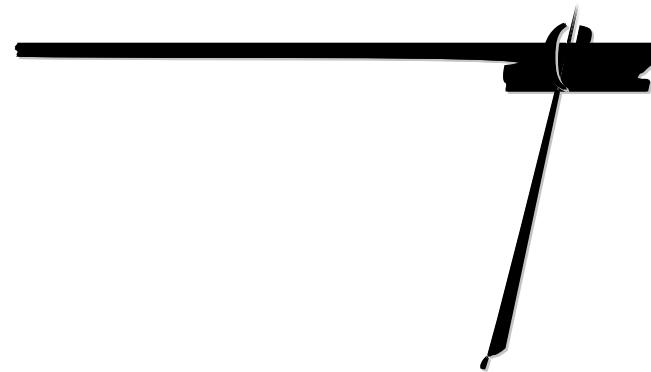




3.

)

:



,

:

$$= \quad 1 \quad 1 + \quad 2 \quad 2 + \cdots +$$

$$= \sum_{=1}$$

1 1 2 2 ⋯



(1)



(2)

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

(3)

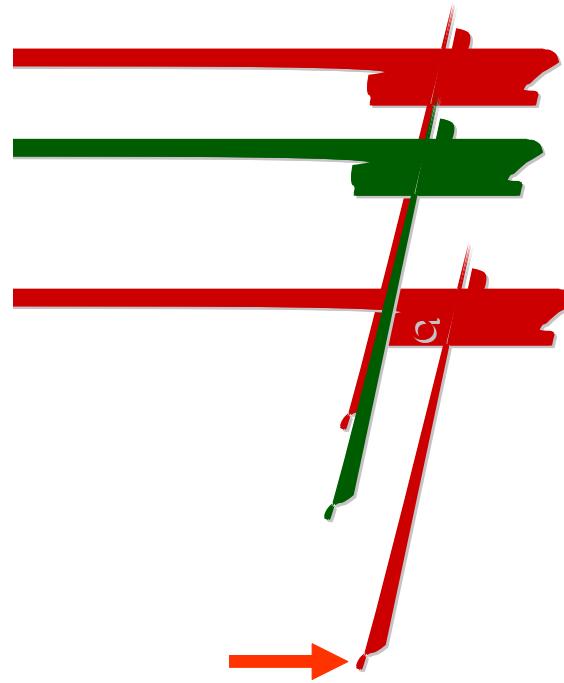
(4)

$$= \sum_{=1}$$

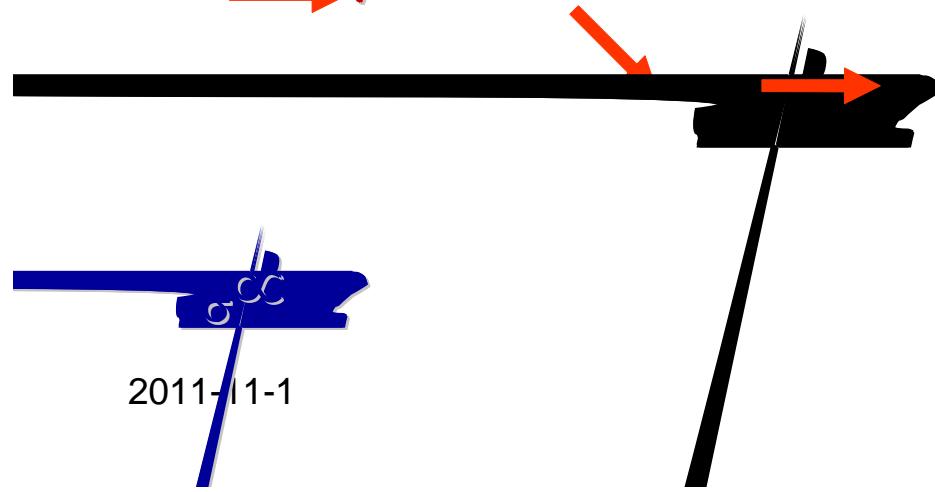
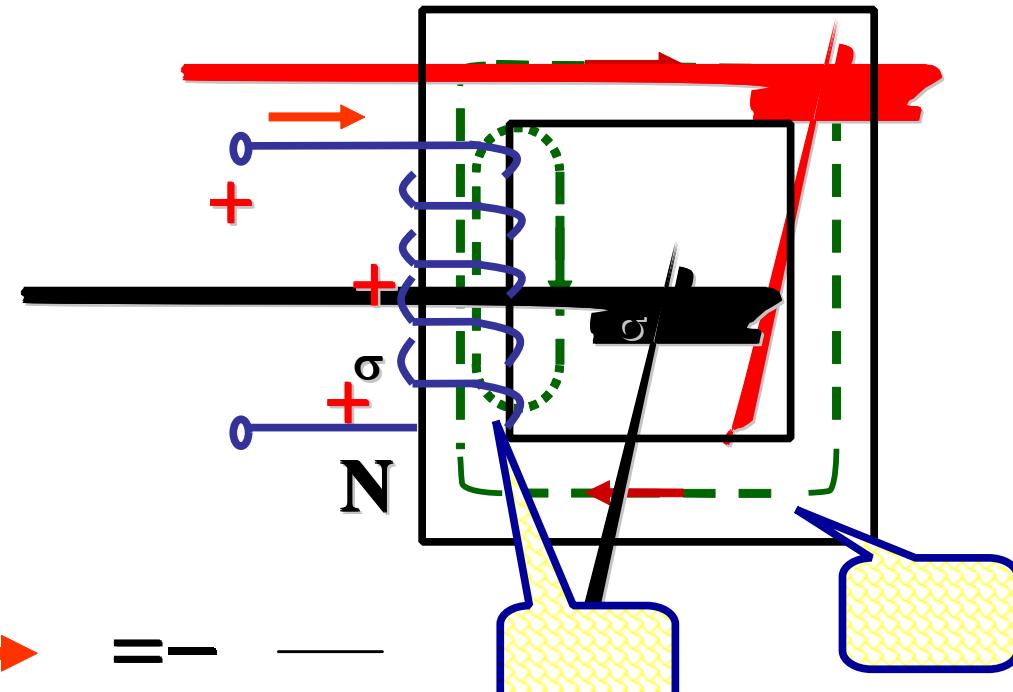
6.2



6.2.1



$$\Phi \rightarrow \equiv - \quad -$$



二二二

2011-11-1



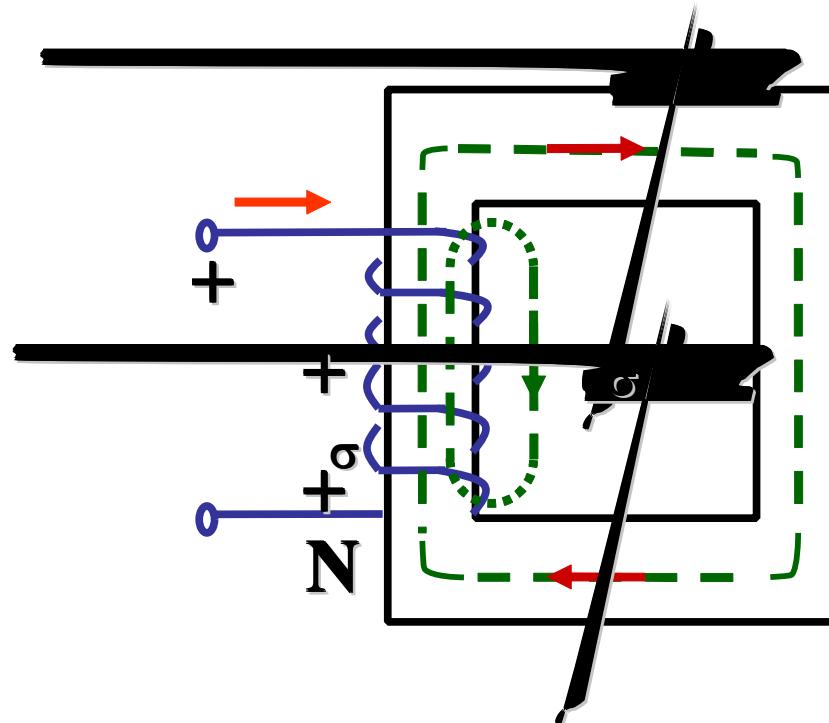
6.2.2

KVL:

$$= - -$$

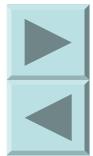
$$= + - + (-)$$

σ

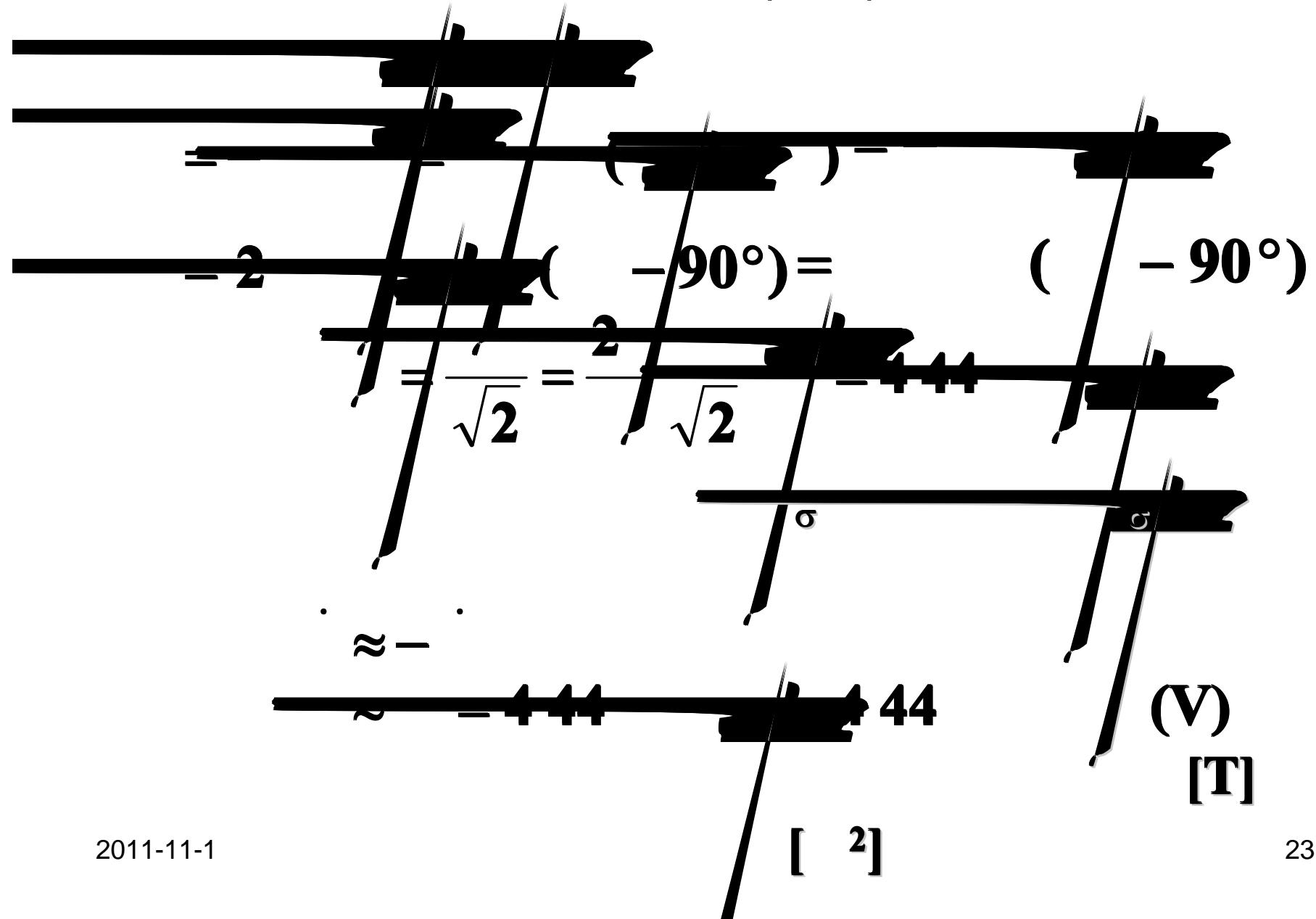


$$\cdot = \cdot + (- \cdot) + (- \cdot)$$

$$= \cdot + \cdot + (- \cdot)$$



$$\cdot = \cdot + \cdot + (-\cdot)$$





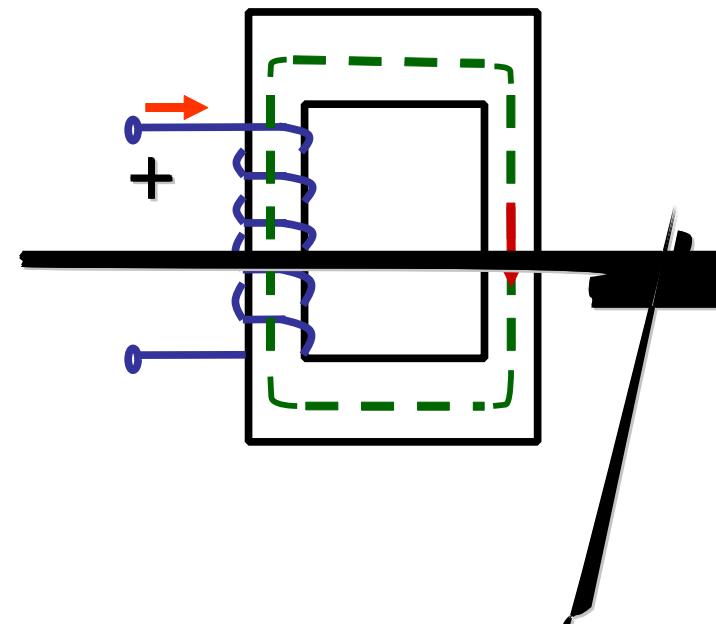
6.2.3

1. (Δ_c)

,
 $\Delta_c = 2$

2. (Δ_F)

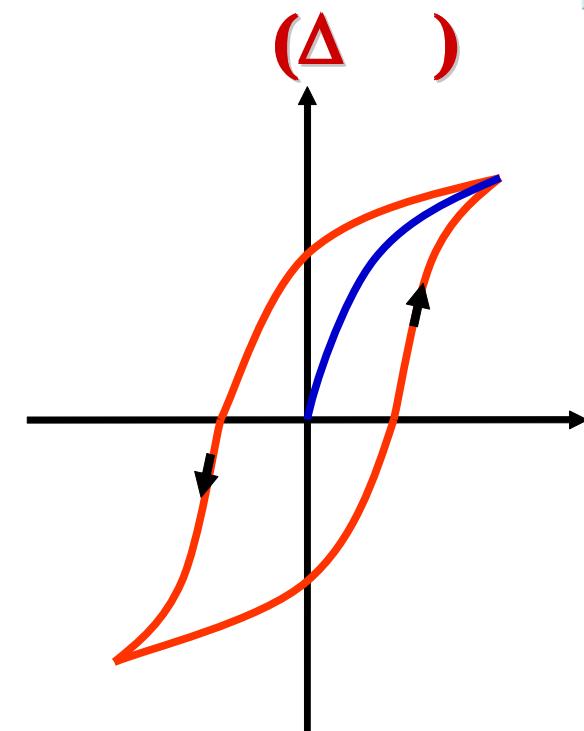
Δ_F





1

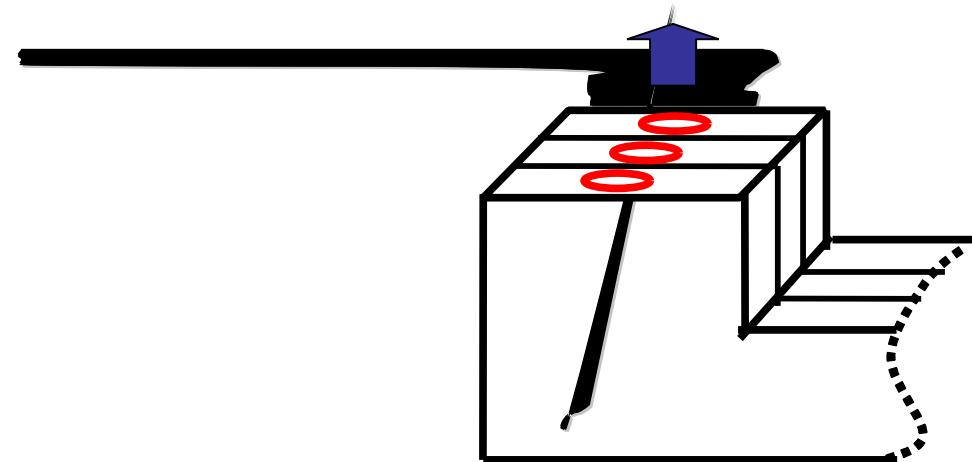
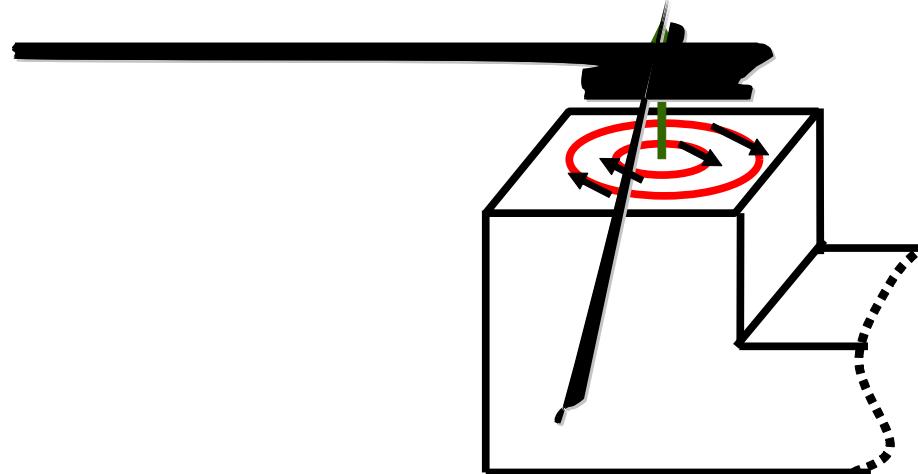
Δ



(2)

Δ

:



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



6.3

6.3.1

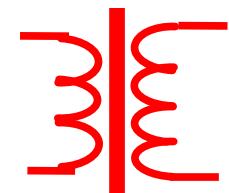
{

= c

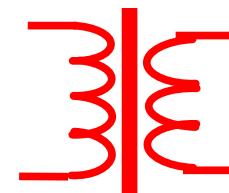
$$\begin{matrix} & \text{c} \\ \uparrow \rightarrow & \left\{ \begin{matrix} \Delta & \downarrow = \\ & \downarrow \\ & \rightarrow \end{matrix} \right. \end{matrix}$$



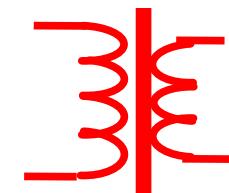
10.5kV



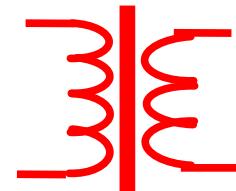
220kV



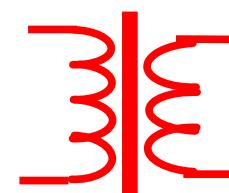
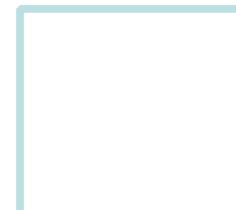
10kV



...



380V
220V



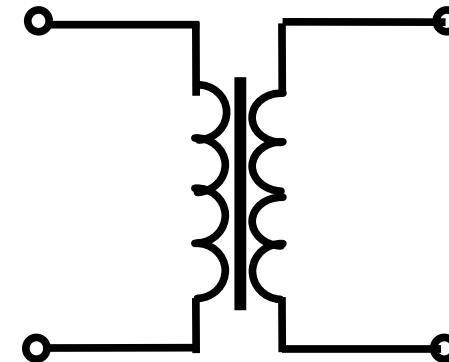
36V

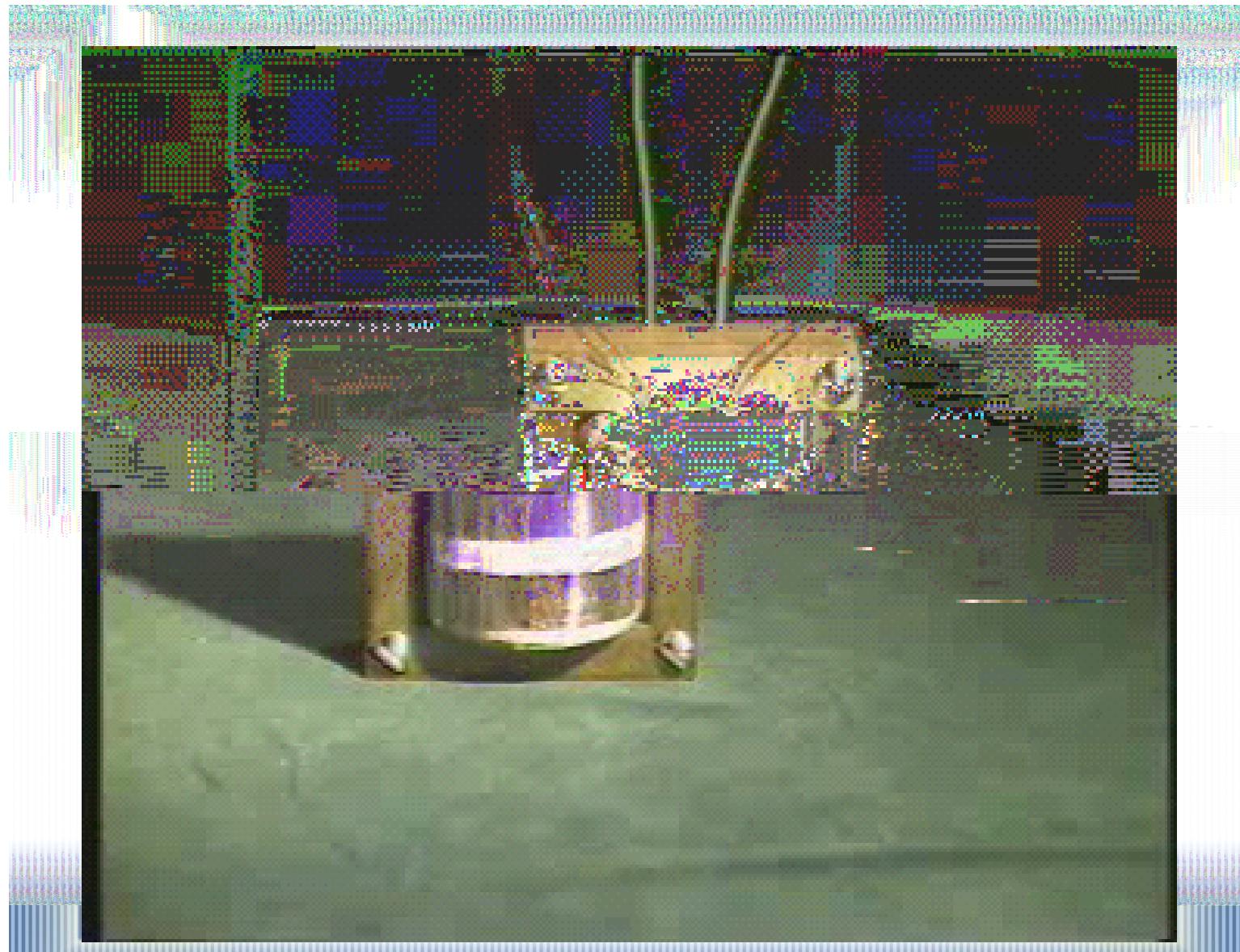




1.

$$\left. \left(\left. \left. \right. \right. \right. \right)$$

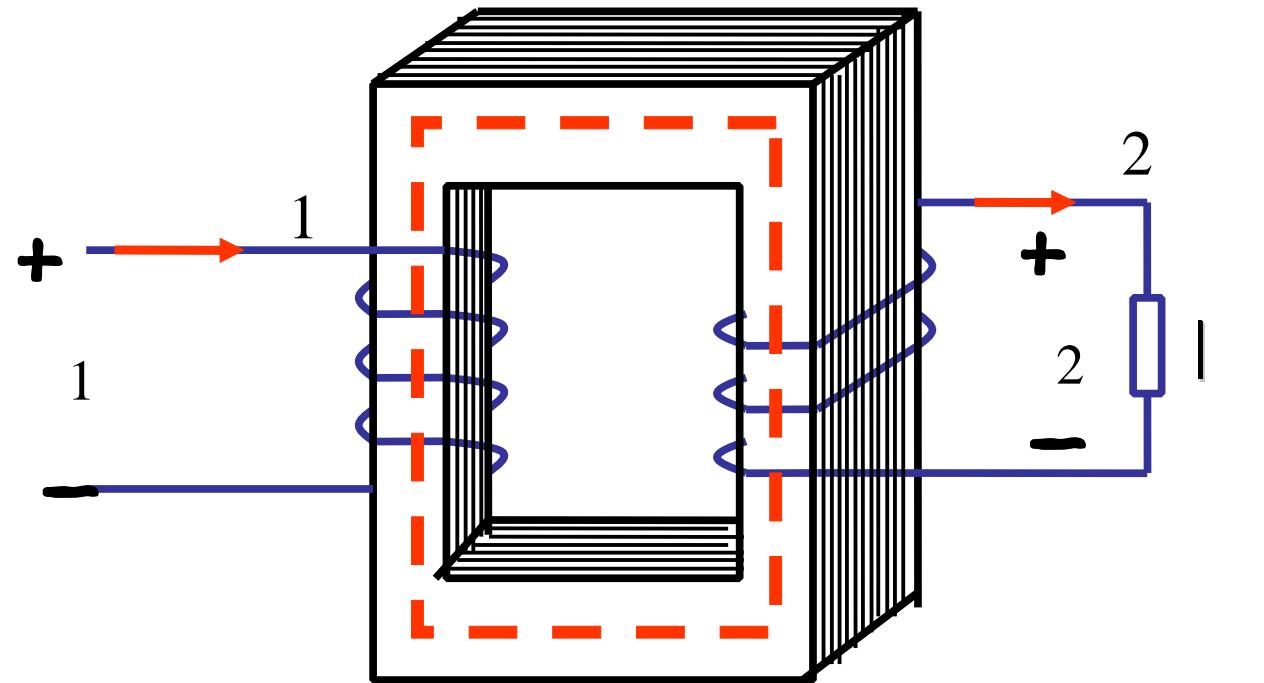




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30

2.



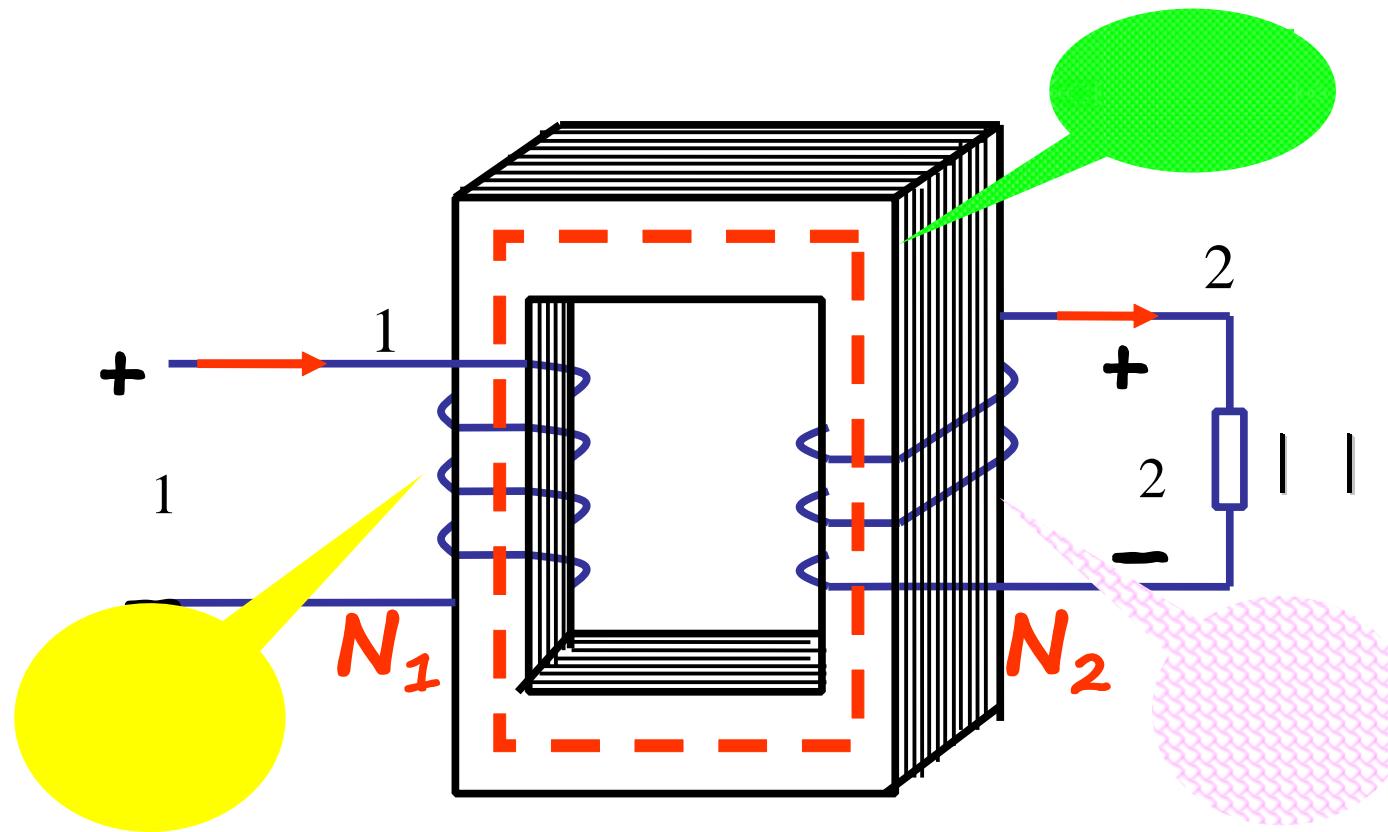
{

0.35mm

0.5mm

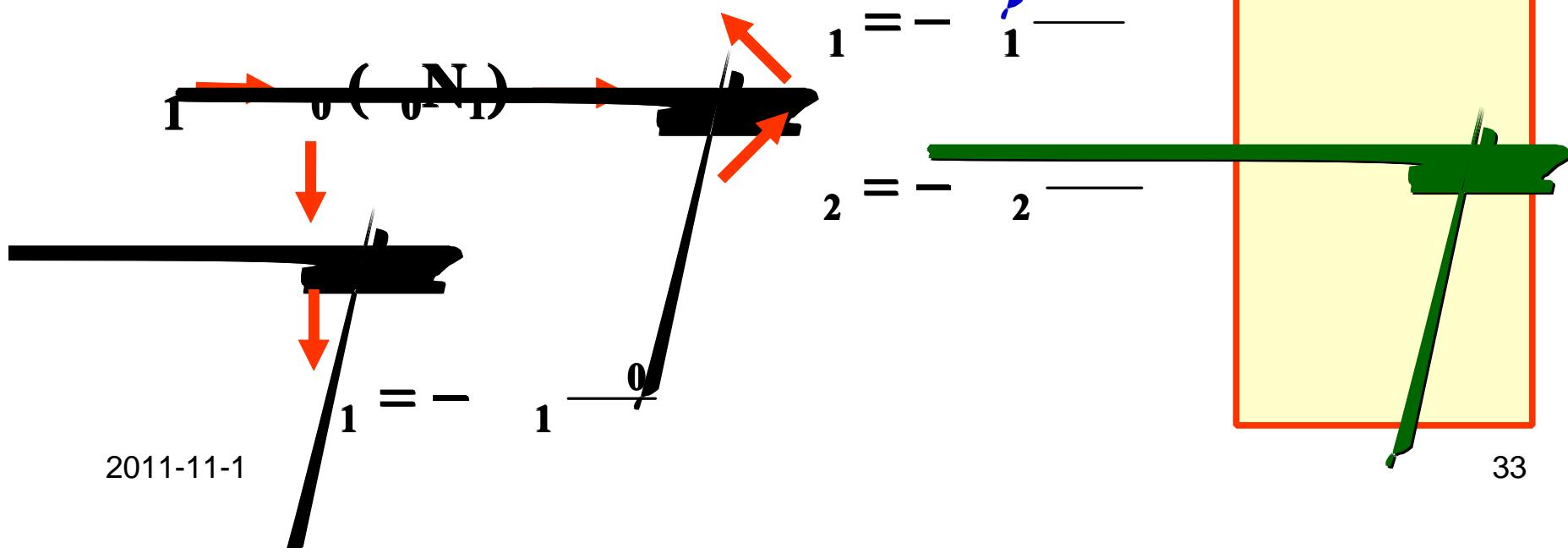
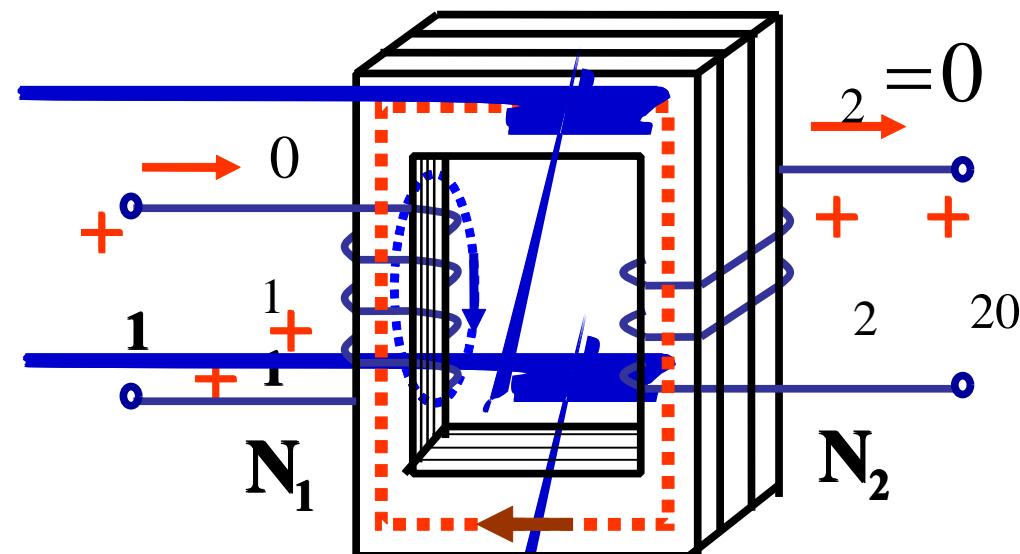


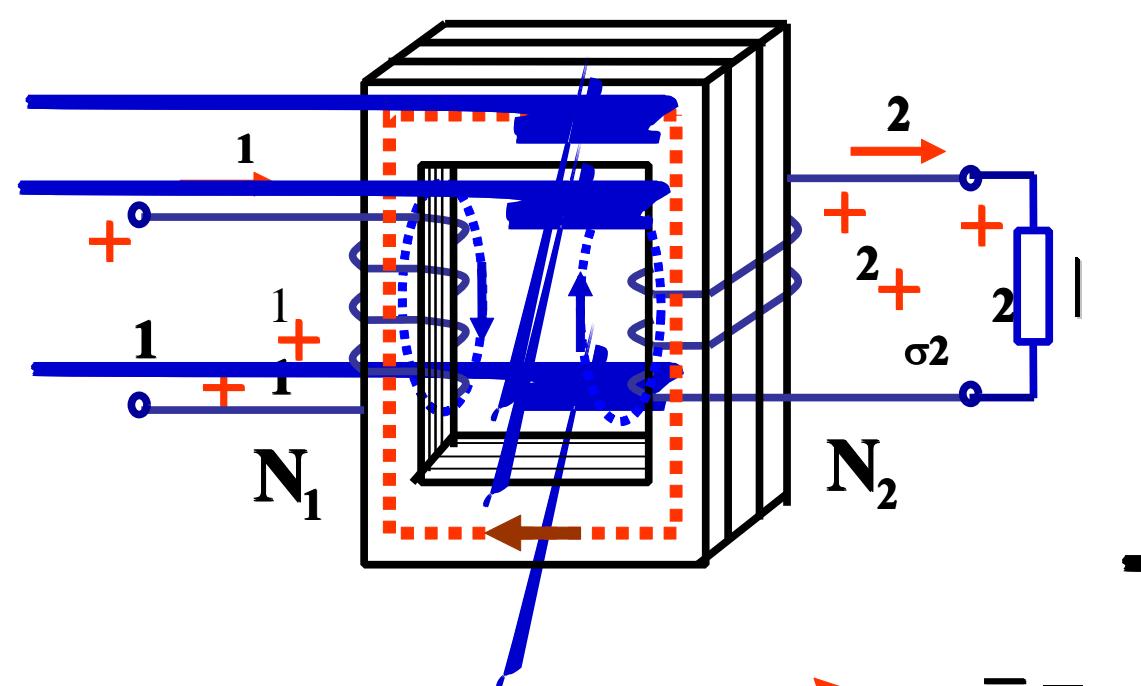
6.3.2





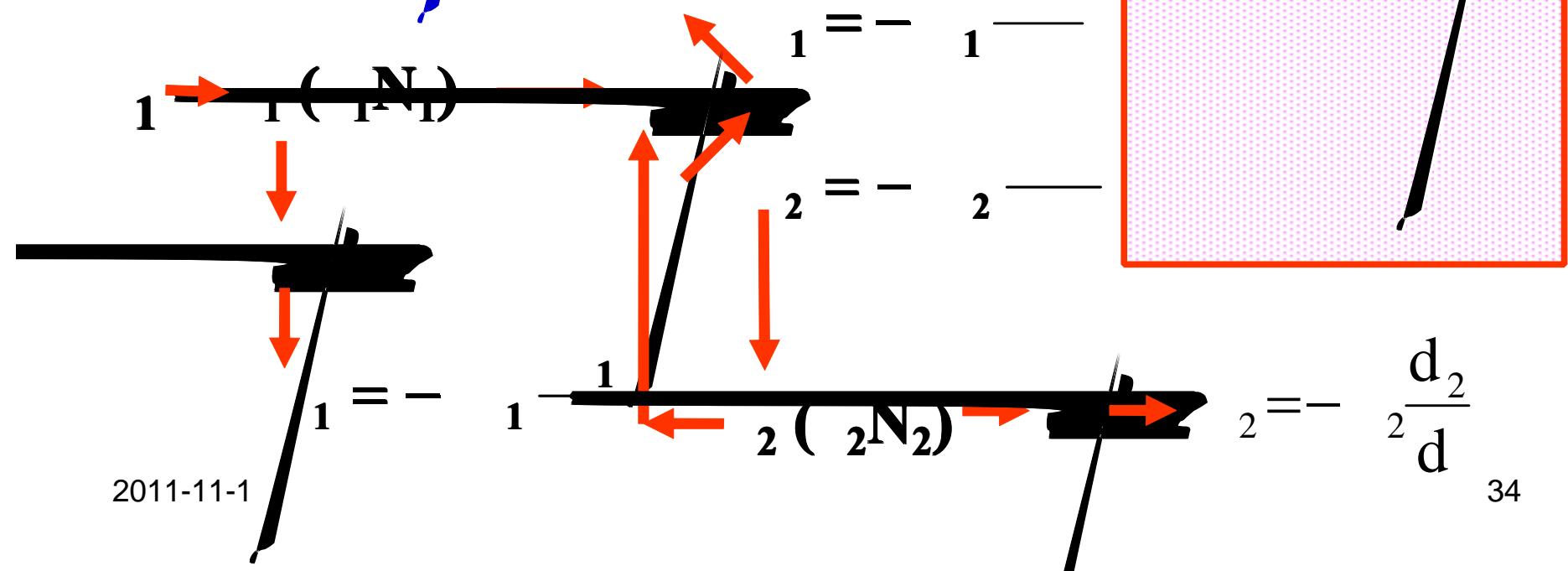
1.
(1)





1.

(2)



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34



2.

(1)

$$\Phi = \Phi_m \sin \theta$$

$$I_1 = - I_1 \frac{d\Phi}{dt} = - I_1 \frac{d}{dt} (\Phi_m \sin \theta)$$

A diagram showing a rectangular coil rotating about a horizontal axis. The top horizontal segment of the coil is labeled I_1 . A vertical line extends from the center of the coil, labeled θ , which is shown at -90° . The angle θ is measured between the vertical line and the horizontal axis.

$$= I_1 \left(-90^\circ \right)$$

$$\therefore I_1 = \frac{1}{\sqrt{2}} = \frac{2}{\sqrt{2}} I_1 \Phi$$

A diagram showing a rectangular coil rotating about a horizontal axis. The bottom horizontal segment of the coil is labeled I_1 . A vertical line extends from the center of the coil, labeled θ , which is shown at -90° . The angle θ is measured between the vertical line and the horizontal axis.

$$I_2 = I_2 \left(-90^\circ \right)$$

A diagram showing a rectangular coil rotating about a horizontal axis. The bottom horizontal segment of the coil is labeled I_2 . A vertical line extends from the center of the coil, labeled θ , which is shown at -90° . The angle θ is measured between the vertical line and the horizontal axis.



(2)

KVL

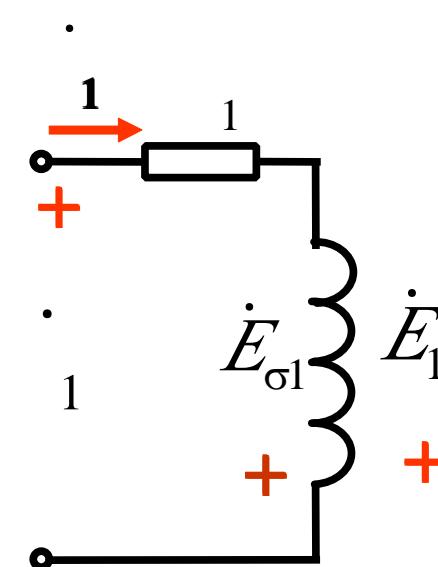
$$\begin{aligned} \dot{\varphi}_1 &= \dot{\varphi}_1 - \dot{\varphi}_1 - \dot{\varphi}_1 + \dot{\varphi}_1 \\ &= \dot{\varphi}_1 + \dot{\varphi}_1 - \dot{\varphi}_1 - \dot{\varphi}_1 \end{aligned}$$

;

$$\begin{aligned} \dot{\varphi}_1 &= \sigma_1 \\) \end{aligned}$$

$$1(\quad)$$

$$\begin{aligned} \dot{\varphi}_1 &\approx - \quad , \quad 1 \sim 1 - 444 \quad 1 \end{aligned}$$



(



KVL

2

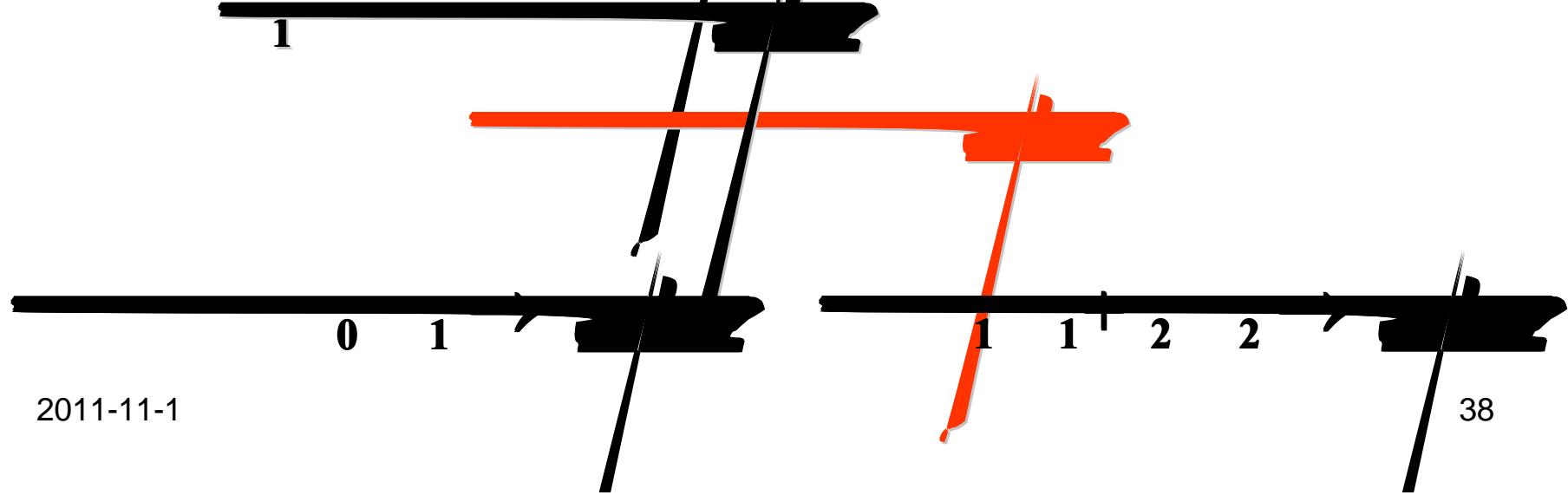
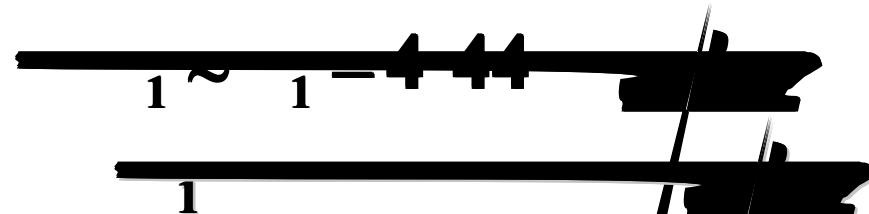
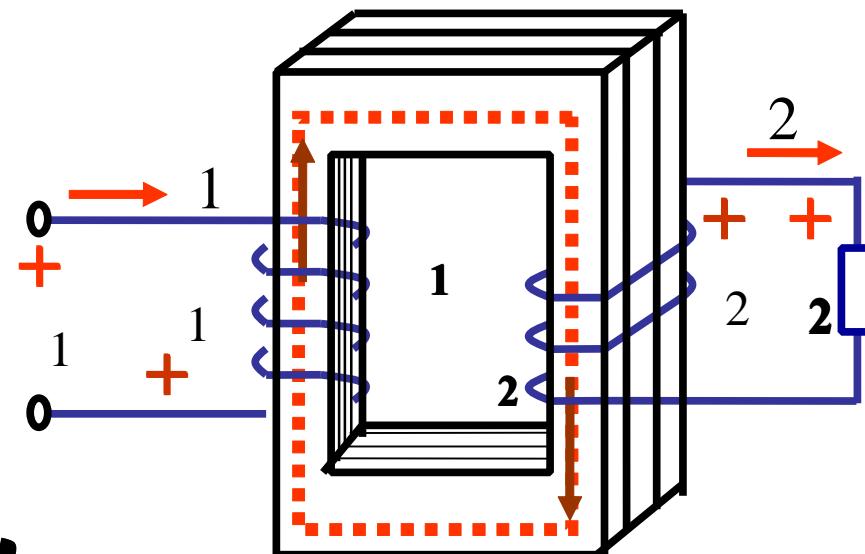
$$\frac{1}{20} \approx \frac{E_1}{E_2} = \frac{1}{2} =$$

3.

()



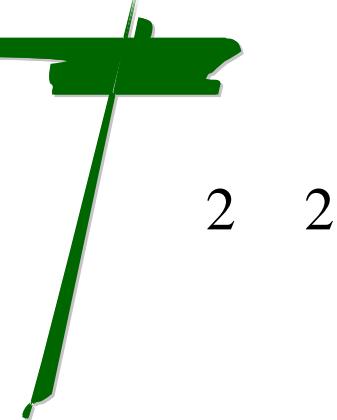
$$\rightarrow \cdot_2 = \frac{\cdot}{2}$$





$$1 \quad 1 + 2 \quad 2 = 0 \quad 1$$

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



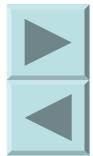
$$0 \approx (2 \ 3)\% \text{ } 1N$$

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

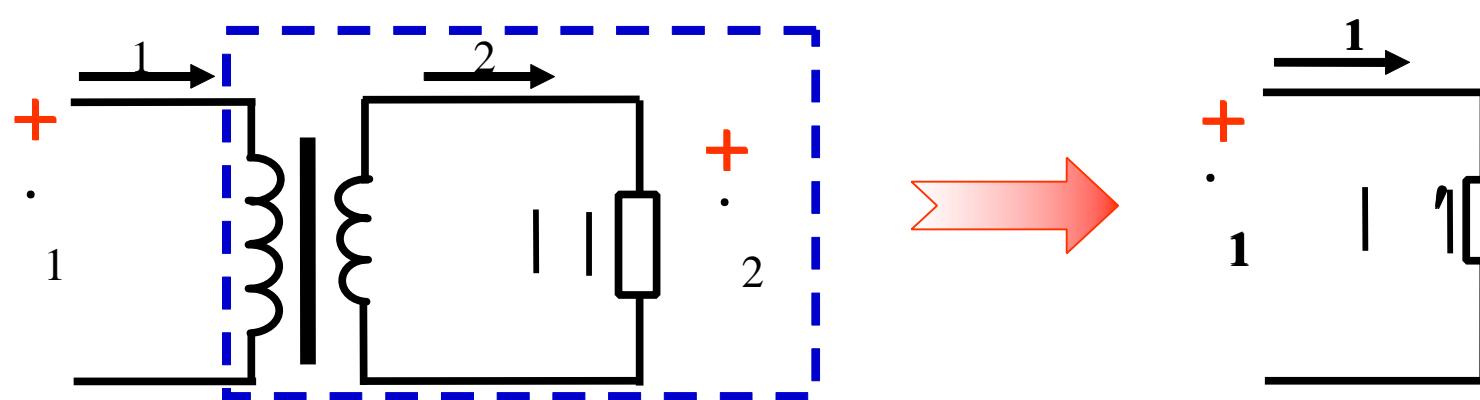
• •

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

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



4.



$$\left| \begin{array}{c} | \\ | \end{array} \right| = -\frac{2}{2}$$

$$\left| \begin{array}{c} | \\ | \end{array} \right| = -\frac{1}{1}$$

$$\left| \begin{array}{c} | \\ | \end{array} \right| = -\frac{1}{1} = -\frac{2}{2} = -\frac{2}{2} = -\frac{2}{2} \quad \left| \begin{array}{c} | \\ | \end{array} \right|$$

$$\left| \begin{array}{c} | \\ | \end{array} \right| = -2 \quad \left| \begin{array}{c} | \\ | \end{array} \right|$$

2



1:

$$= 120V$$

$$_0 = 800$$

$$\Omega$$

$$= 8\Omega$$

$$\therefore (1) \quad R' = R_0$$

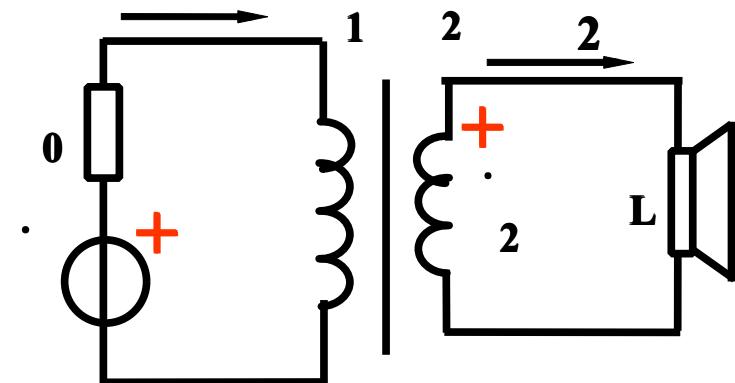
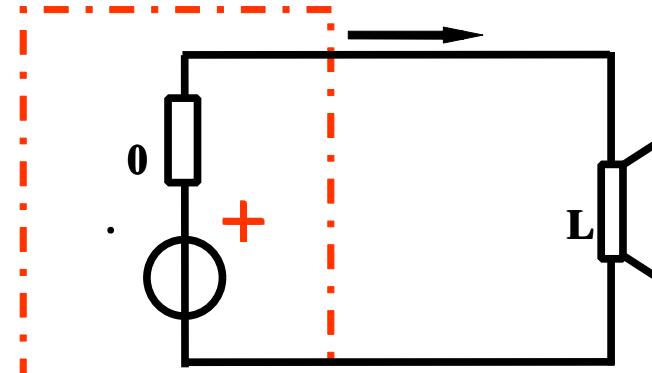
2

,

$\therefore (1)$

$$= \frac{1}{2} = \sqrt{\frac{L'}{L}} = \sqrt{\frac{800}{8}} = 10$$

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41



$$= \left(\frac{1}{R_0 + \frac{1}{L'}} \right)^2 \times L' = \left(\frac{120}{800 + 800} \right)^2 \times 800 = 4.5 \text{ W}$$

2

$$= \left(\frac{1}{R_0 + \frac{1}{L}} \right)^2 \times L = \left(\frac{120}{800 + 8} \right)^2 \times 8 = 0.176 \text{ W}$$

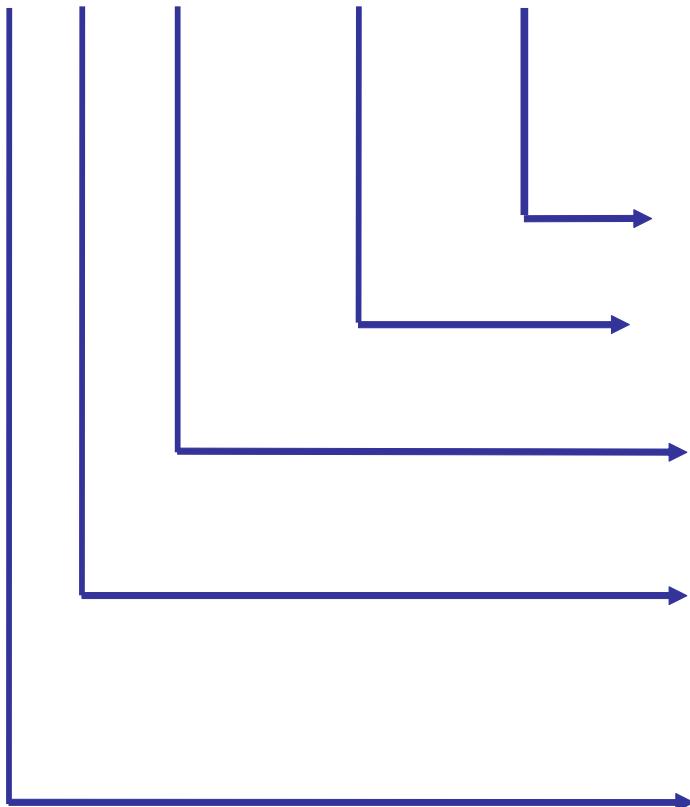
$$\frac{1}{L'} = R_0$$



5.

1)

S J L — 1000/10



(V)

(VA)

{ J:
F:

{ S:
D:

2)



1N **2N**

{
 1N
 2N
 1N **2N**

1N **2N**

{



2)

N

{

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

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

()

{

$$N = 1N \times 1N$$

$$2 = 2 \quad 2 \text{ C}$$

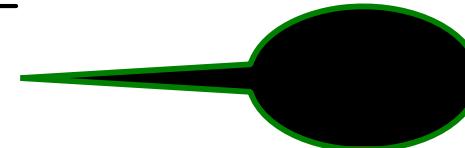
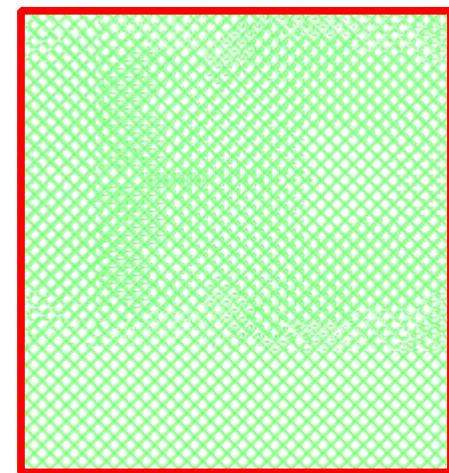
$$1 = \frac{2}{2}$$

N ≠

2

1 ≠

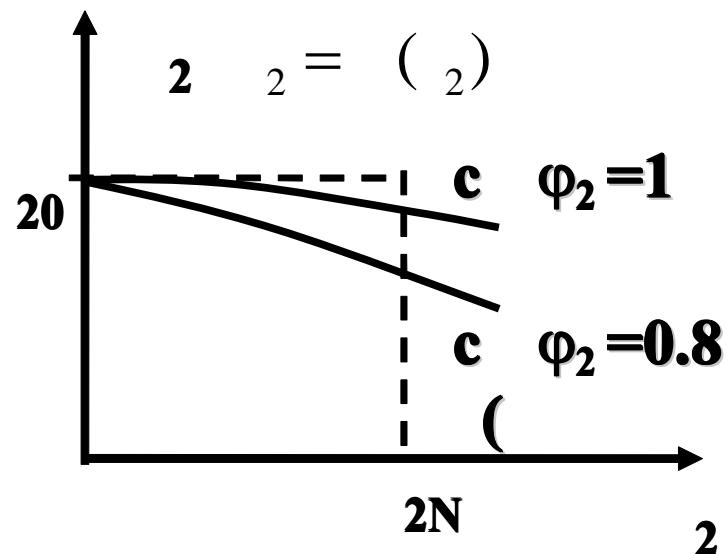
2





6.3.3

1.



$$c_2 = \left(\begin{smallmatrix} & 2 \\ 2 & \end{smallmatrix} \right)$$

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

2
5%



2.

(Δ_c)

(Δ_f)

$$= \frac{2}{1 + \frac{2}{c} + f}$$

95% ,

(50 75)% ,



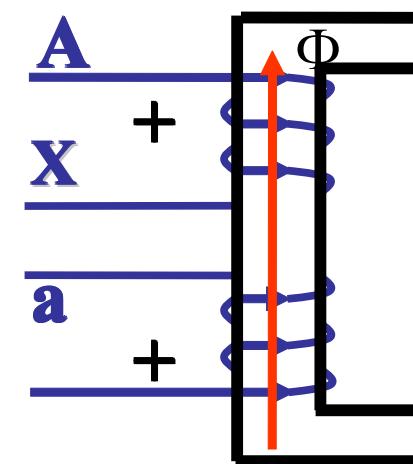
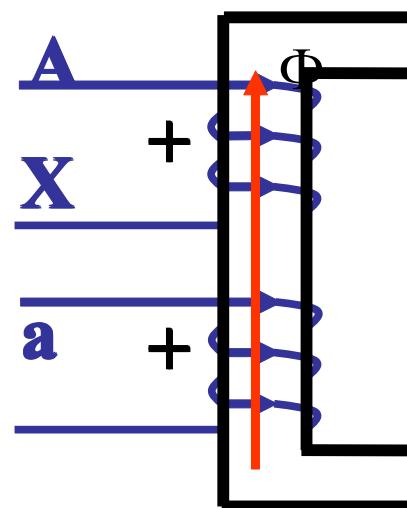
6.3.4

1.

()

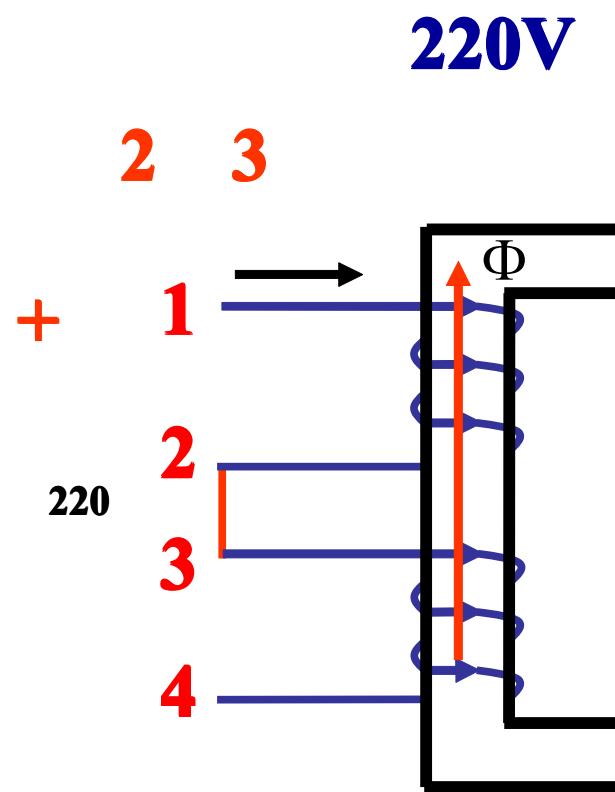
()

()



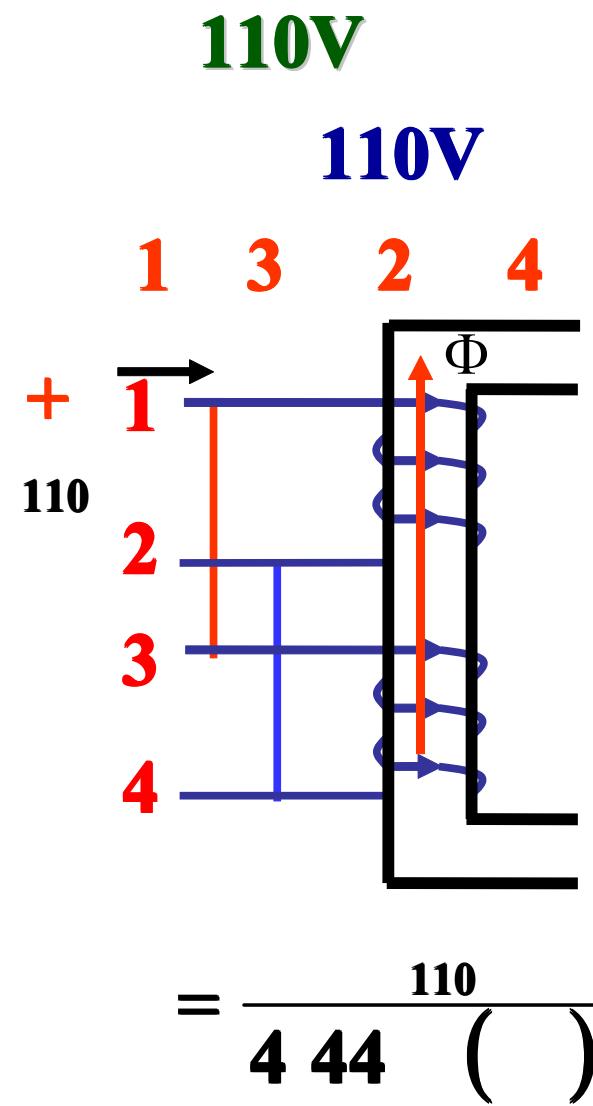


2.



$$= \frac{220}{4 44} (2)$$

2011-11-1



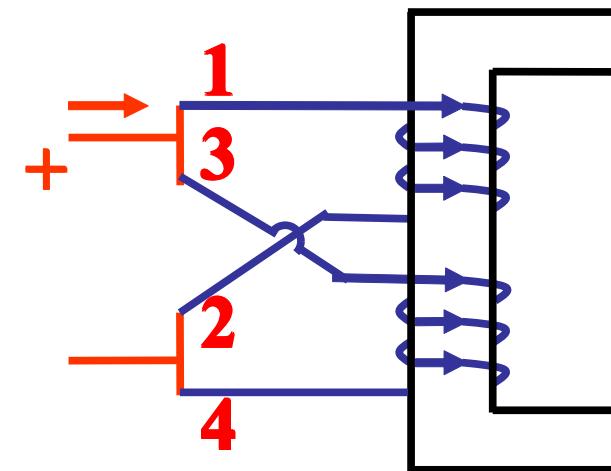
$$= \frac{110}{4 44} ()$$

49



(220/110)

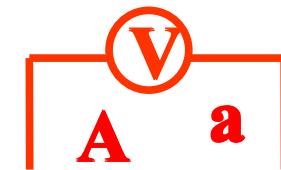
1 110V





2

$$\frac{1}{1} = 1 \quad 1 - 1 = 0$$



$(X -)$,

AX

AX

AX

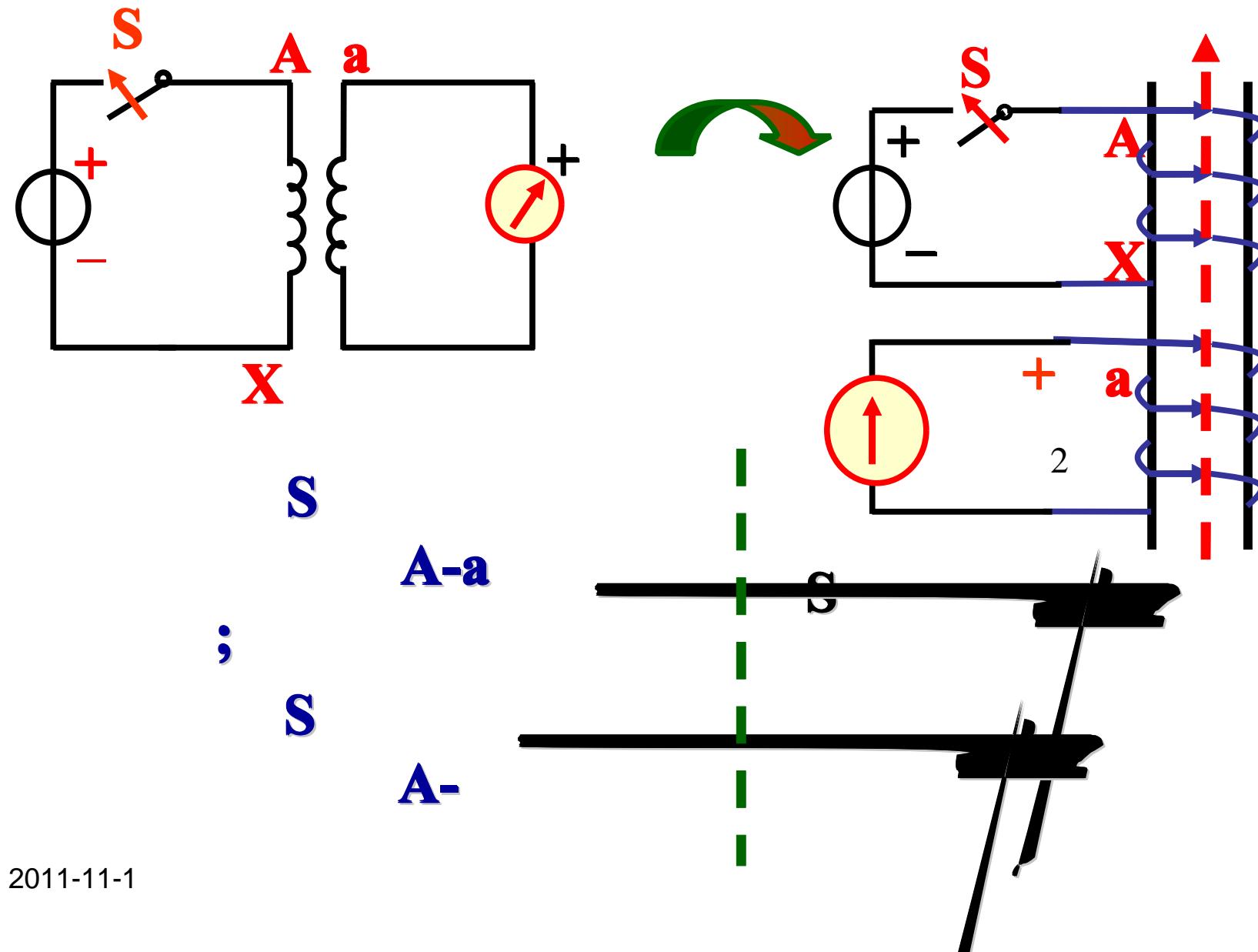
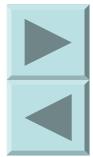
Aa

a

—

A **a** **X**

A **X** **a**

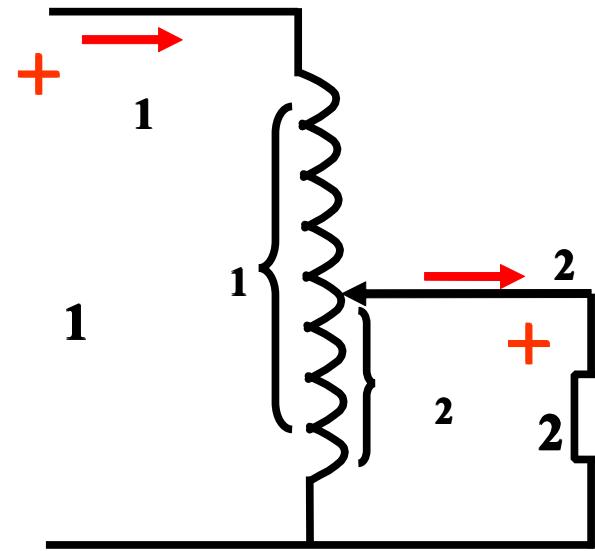




6.3.5

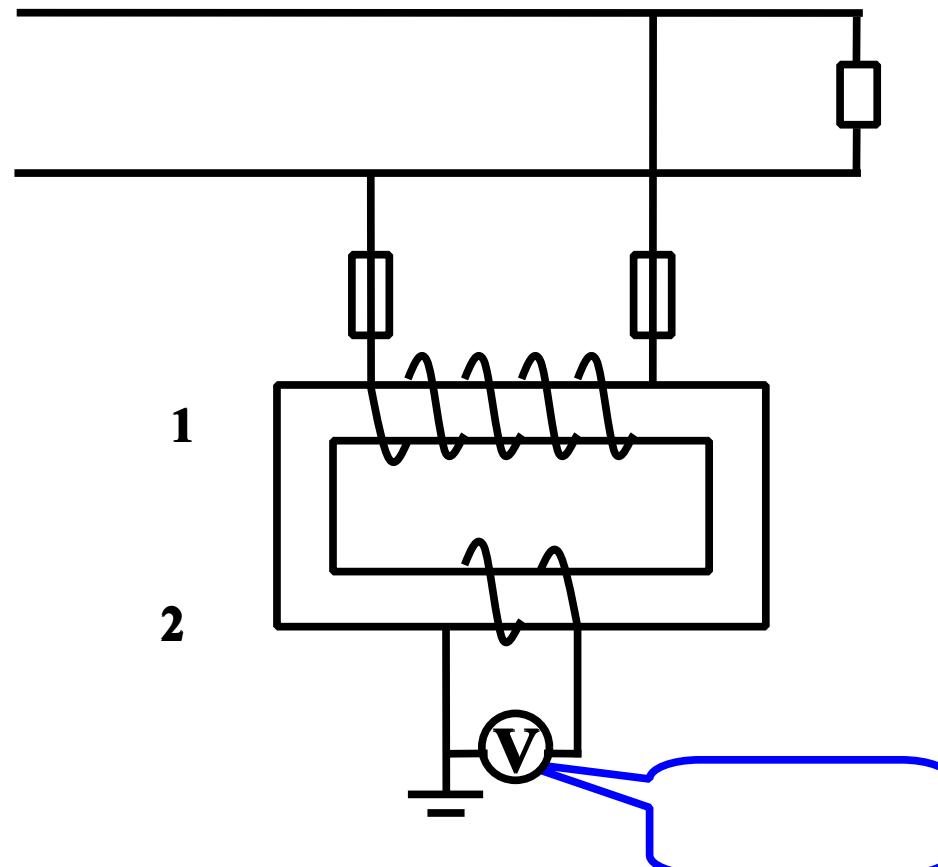
$$\frac{1}{2} = \frac{1}{2} =$$

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





2.



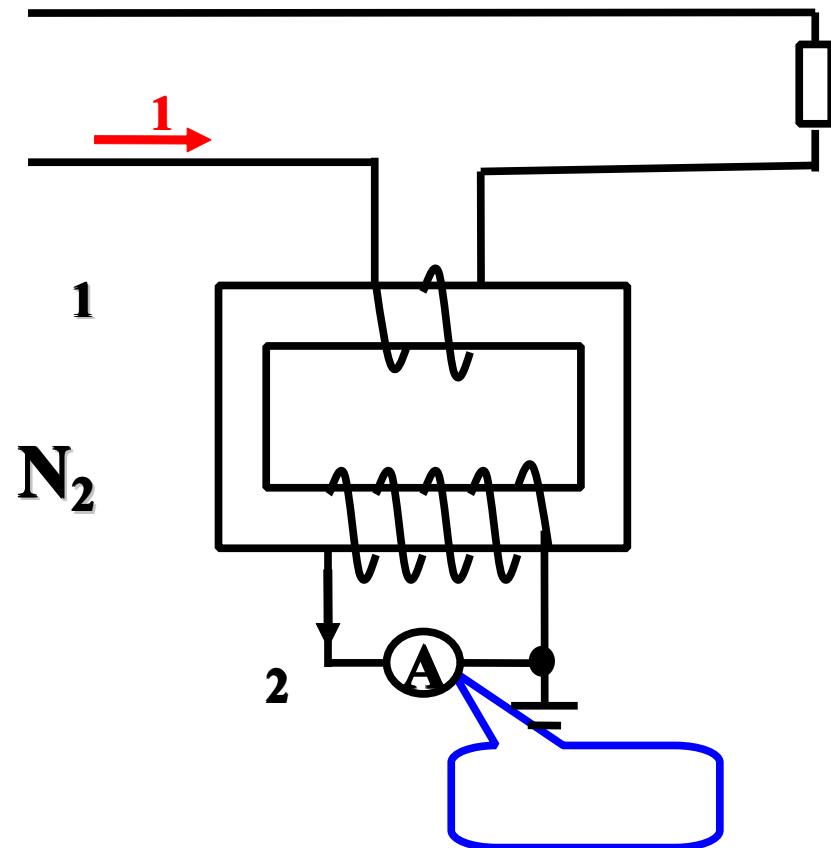
1.

2.

$$= \times 1 / 2$$



3.



1.

2.

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

