6

6.1

6.2

6.3

*6.4

6

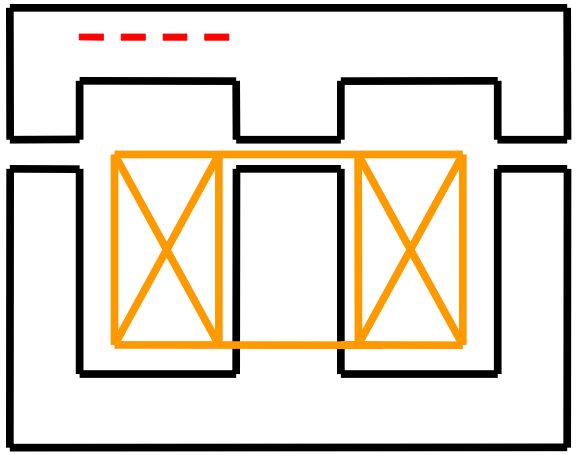
1.

2.

3.

*4.

6.1



6.1.1

1.

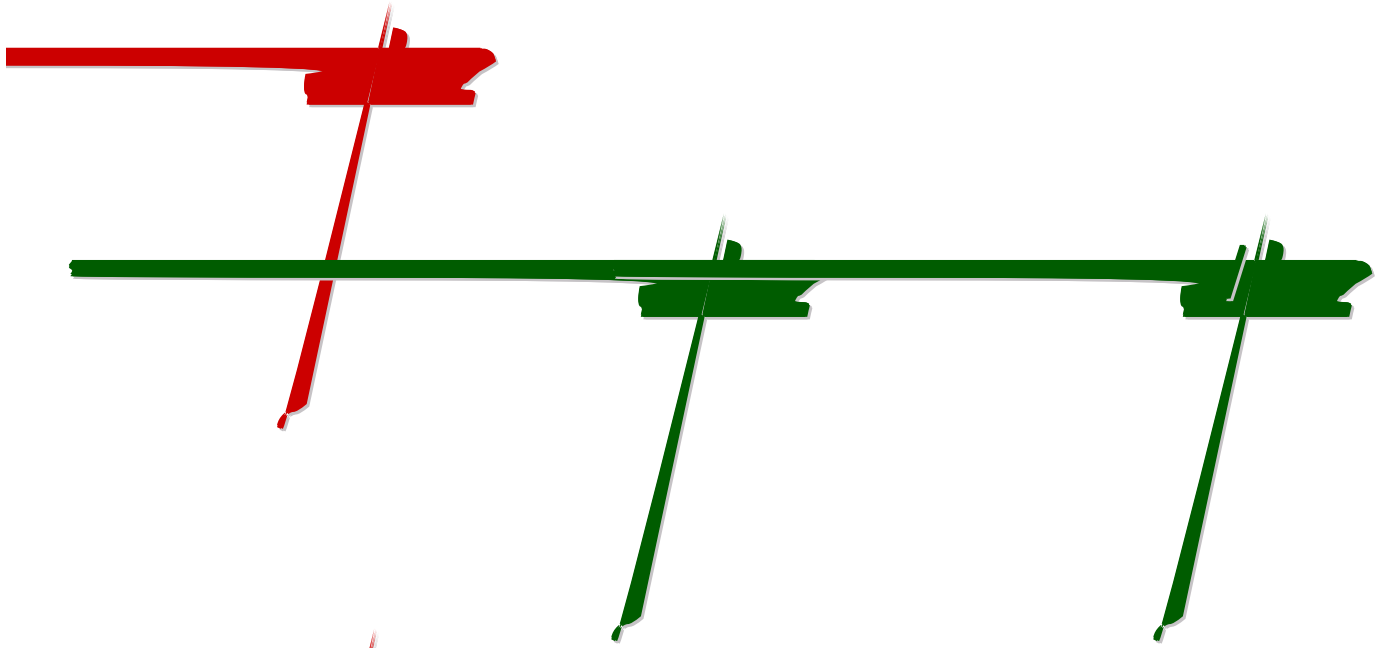
B

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

: **(T)** **1T = 1Wb/** ^{2}

:

2.



：[ ](Wb) 1Wb =1T ^{2}

3

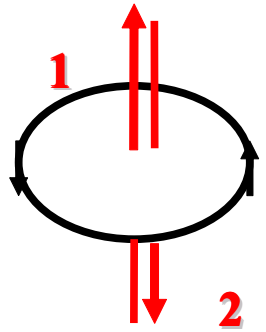
/ A/

$$\oint \qquad = \Sigma$$

$$\oint H \, \mathrm{d}$$

( )

Σ



=——

4.

$$=$$

/ H/

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

$$_0 = 4 \times 10^{-7} \text{ H/}$$

r

0

= —— = ——— = ——

0 0 0

0

6.1.2

1.

>>1 (

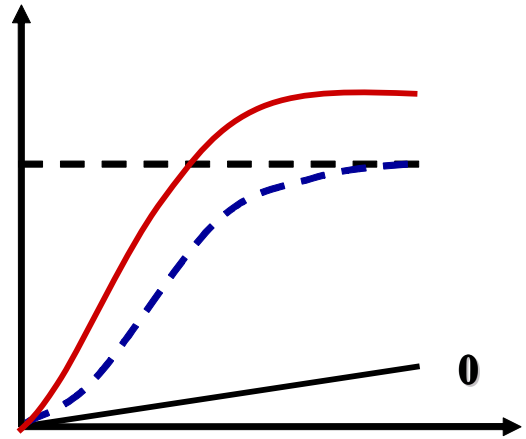
2×10^5)

2.

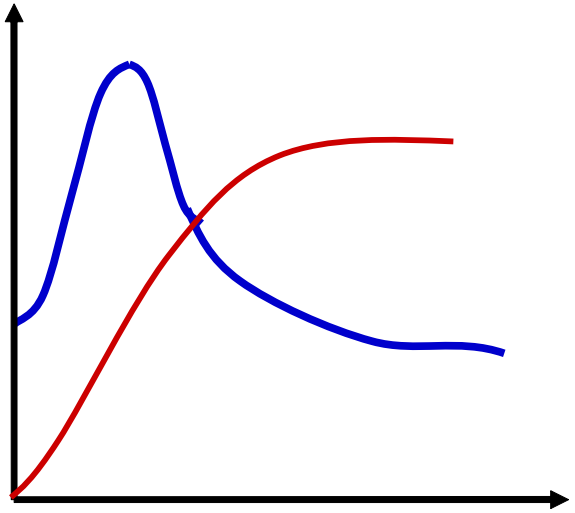
J

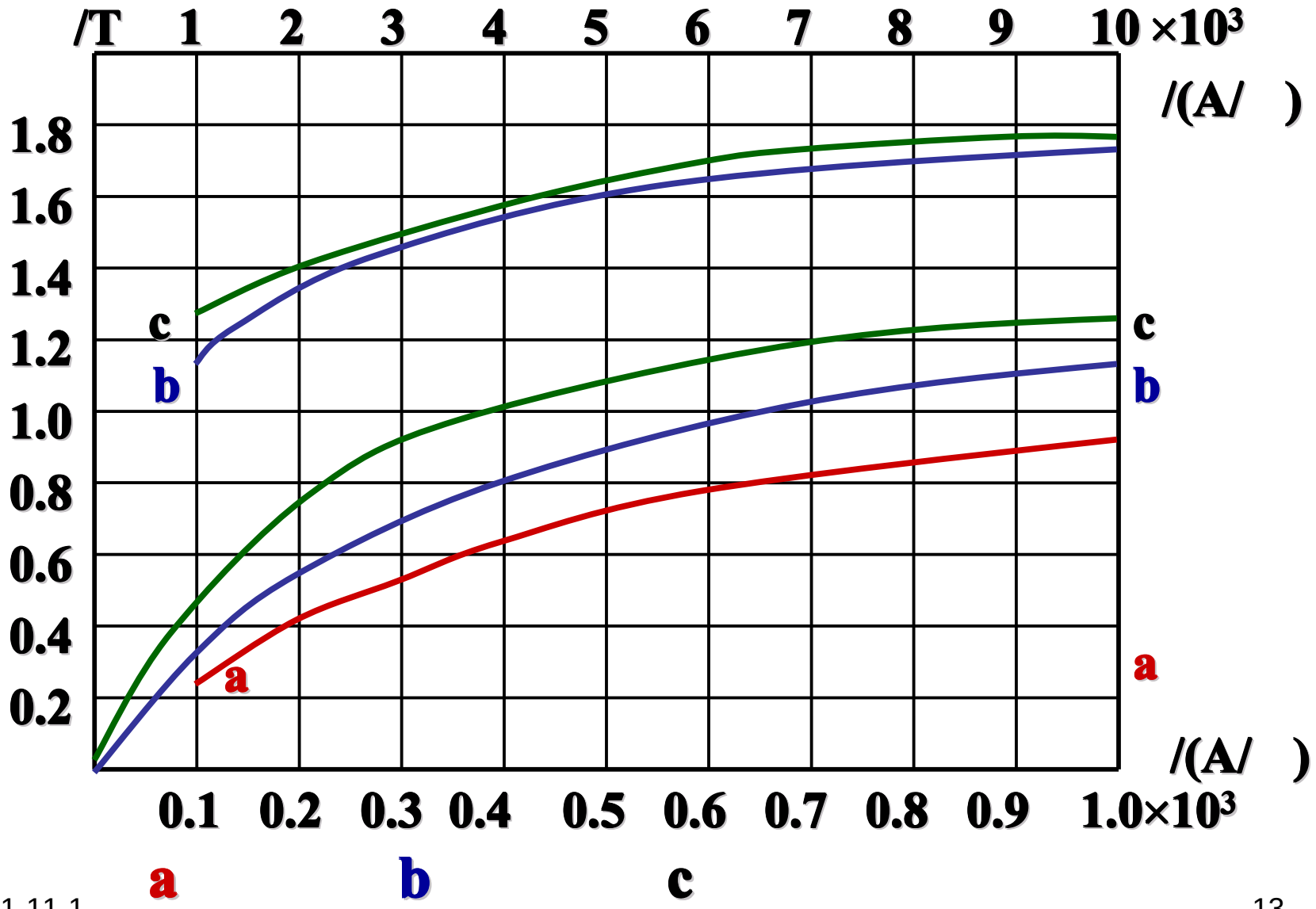
0

J



(Φ)



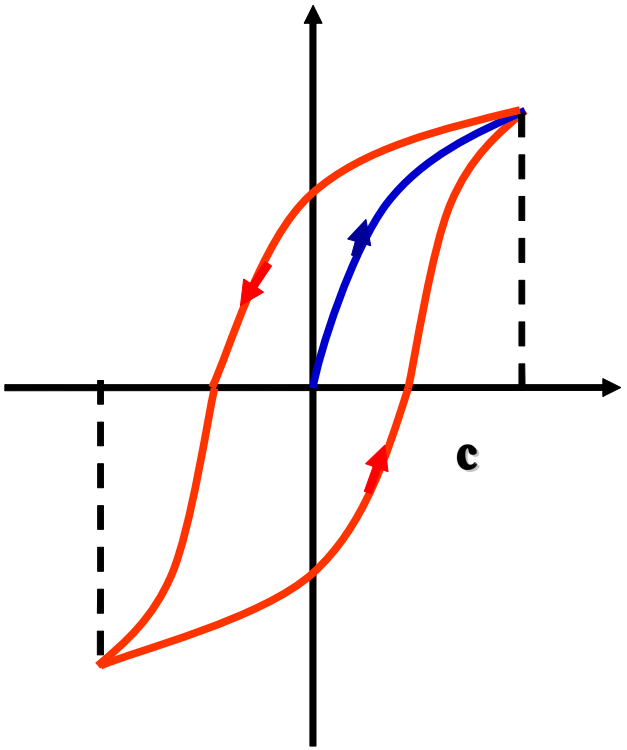

/T
1
2
3
4
5
6
7
8
9
10 ×10³
/(A/)
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
c
b
a
c
b
a
/(A/)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0×10³
a
b
c

3

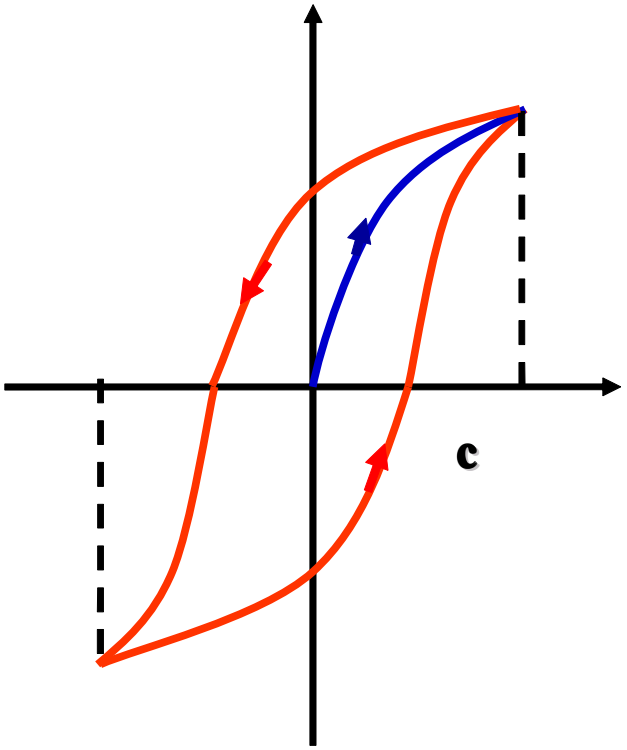
-

(=0)

:



3.



c

= 0

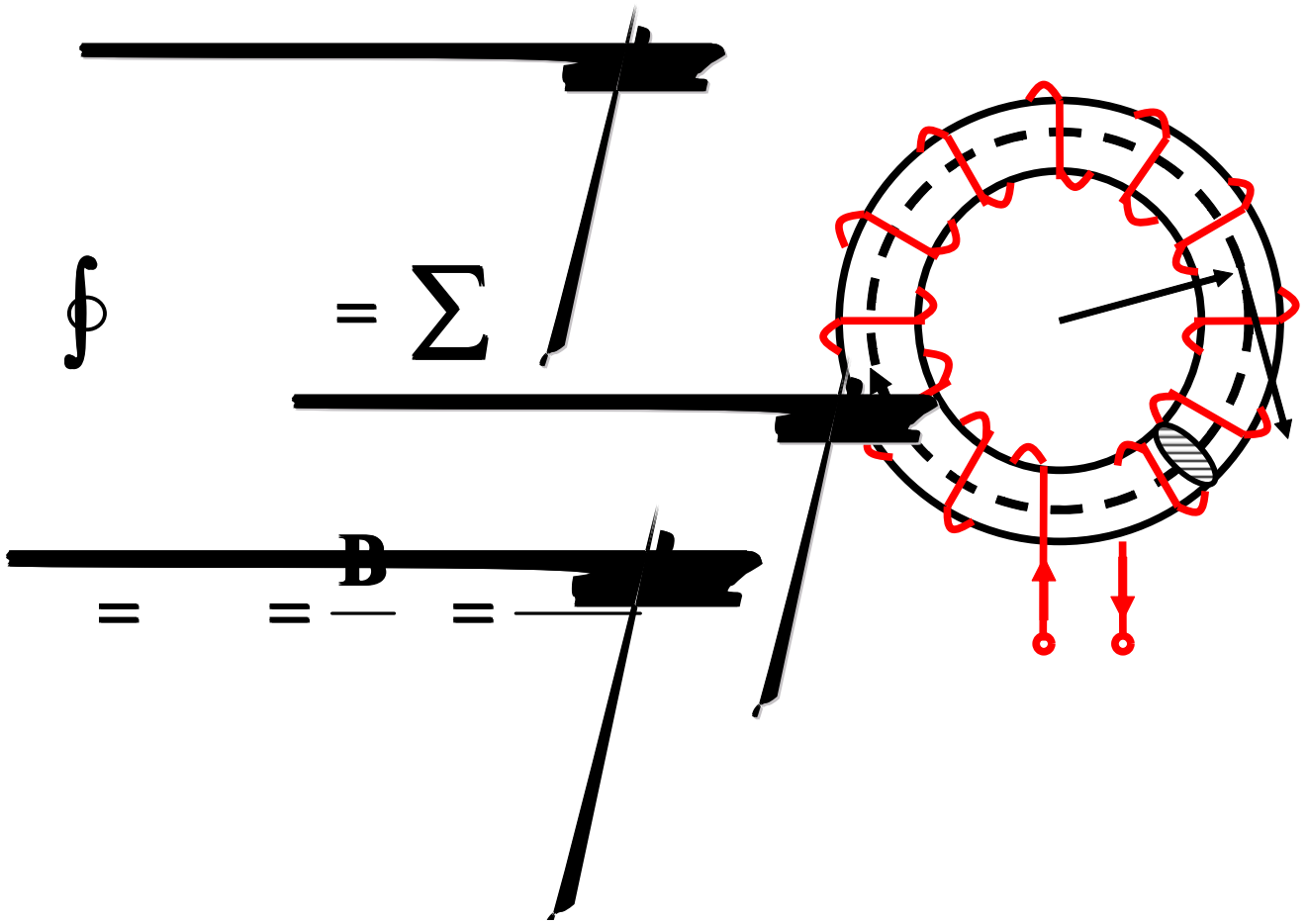
(1)

(2)

(3)

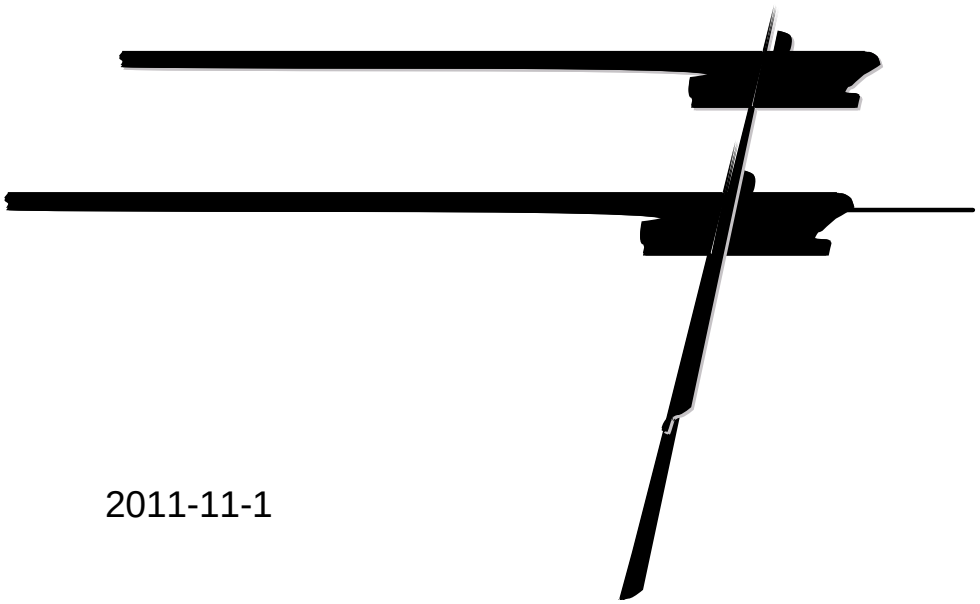
6.1.3

1.



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

2.



3.

:

)

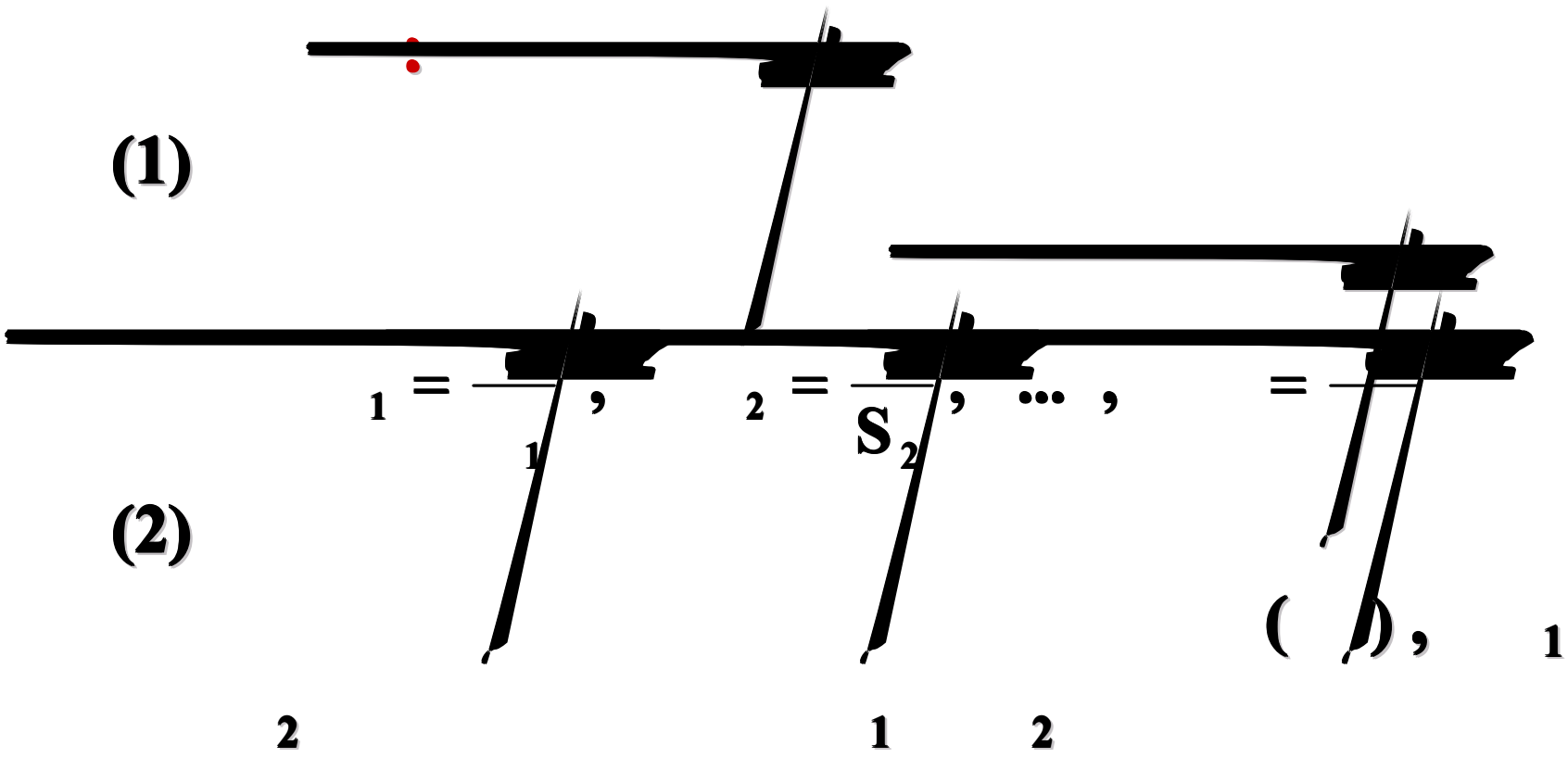
,

:

$$= \quad {}_1 \ {}_1 + \quad {}_2 \ {}_2 + \cdots +$$

$$= \sum_{=1}$$

$$ {}_1 \ {}_1 \quad {}_2 \ {}_2 \cdots$$



(1)

(2)

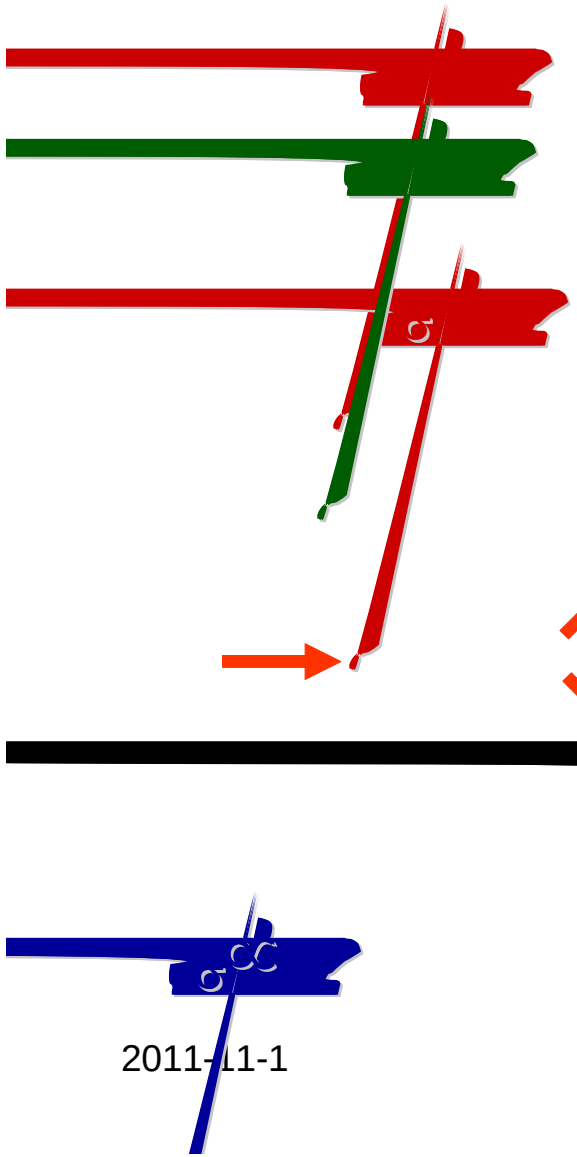
(3)

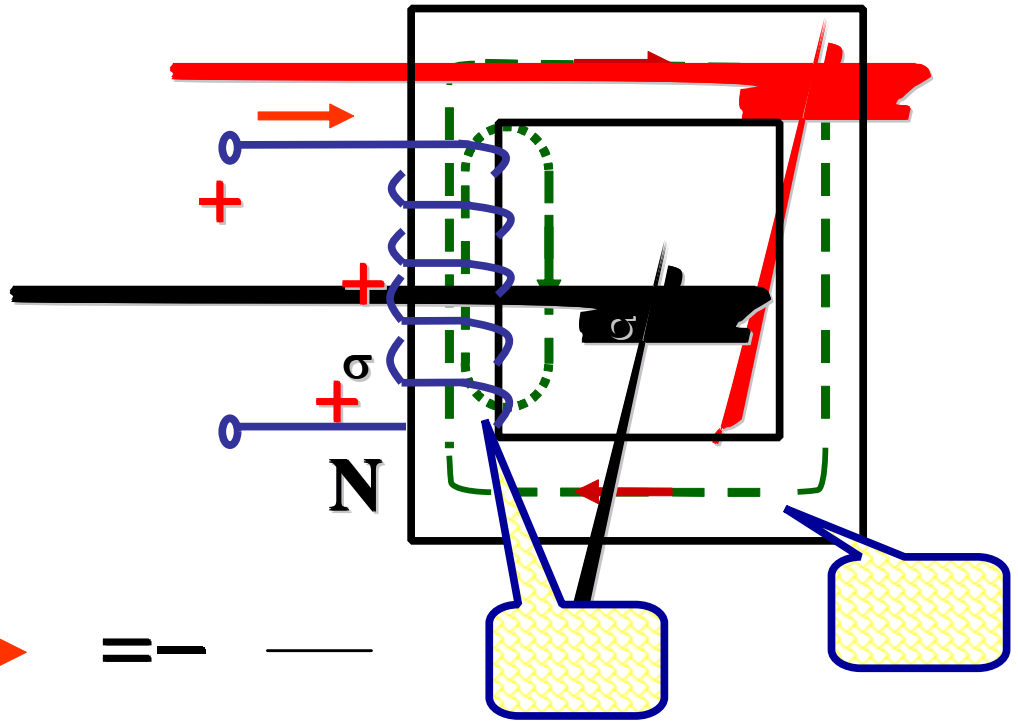
(4)

$$= \sum_{=1}$$

6.2

6.2.1





$$\Phi \rightarrow \quad = - \quad \_\_\_$$

$$= - \quad \_\_\_ = - \quad \_\_\_$$

$$= \_\_\_ =$$

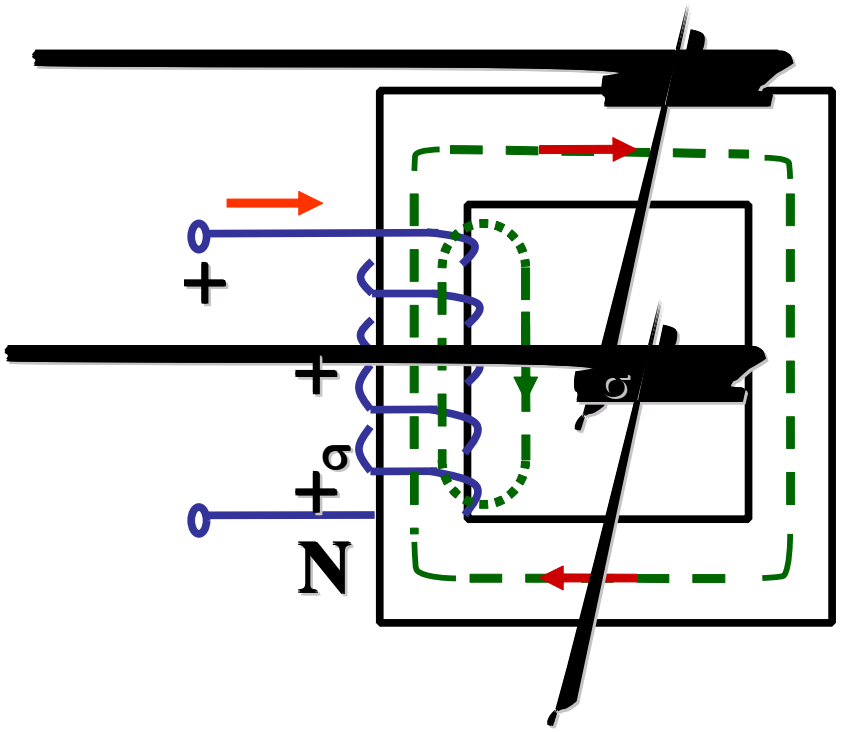
6.2.2

KVL:

$$= \quad - \quad -$$

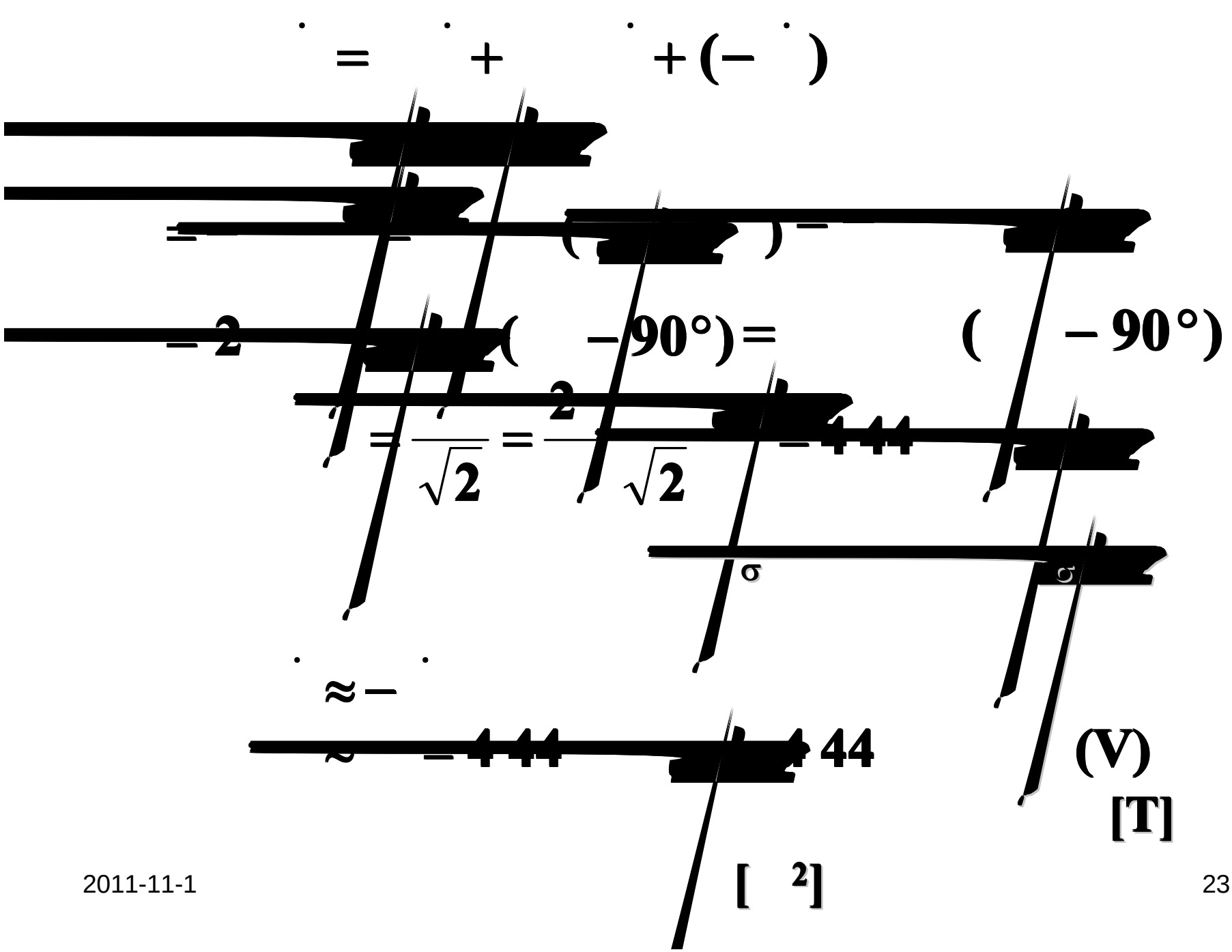
$$= \quad + \quad -\!\!-+(- \ )$$

σ



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

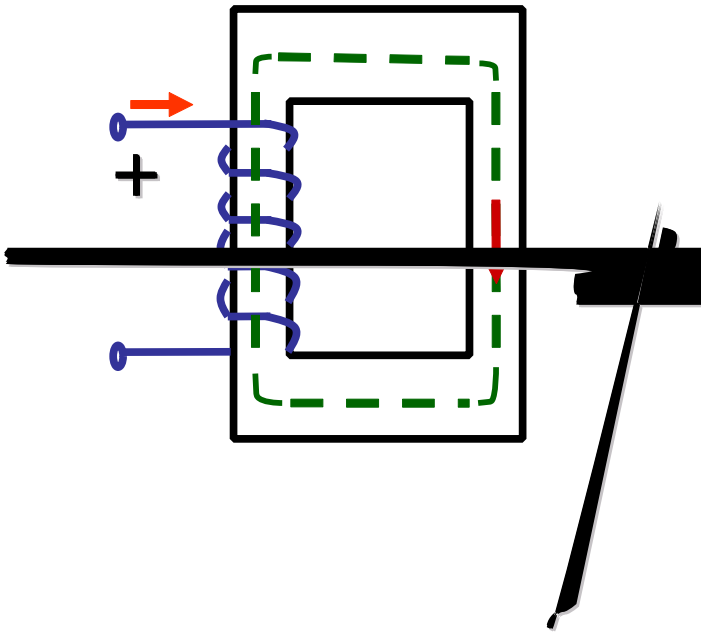
$$= \quad \dot{} + \quad \dot{} + (- \quad \dot{})$$



6.2.3

1. **(Δ_c)**

$$\Delta_c = \frac{\Delta_c}{2},$$

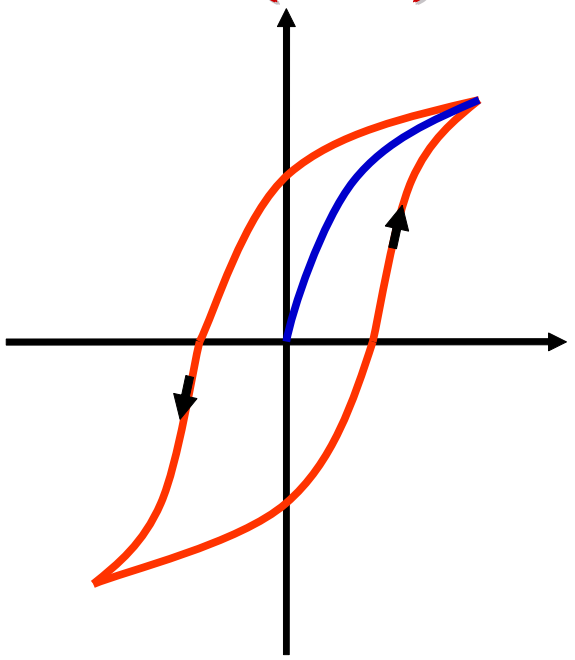


2. **(Δ_F)**

$$\Delta_F$$

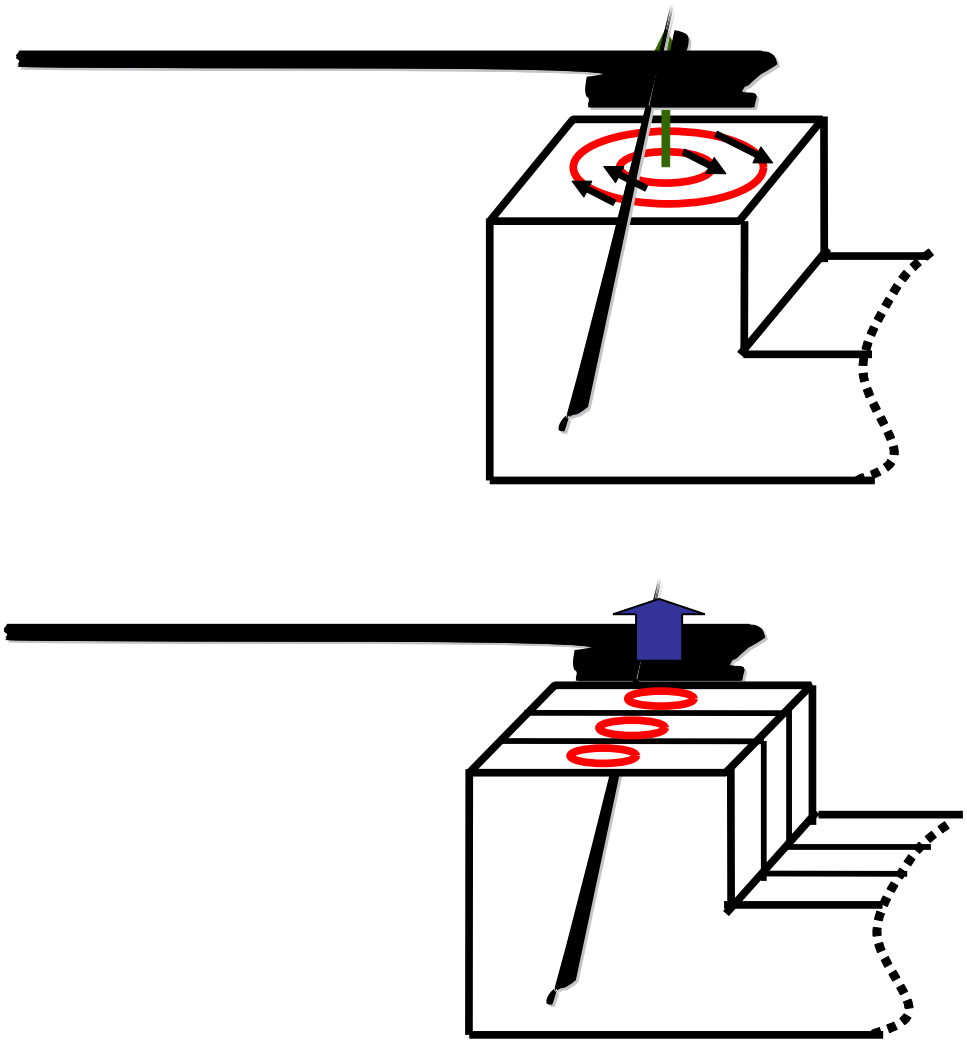
1 Δ

(Δ)



(2) **Δ**

:



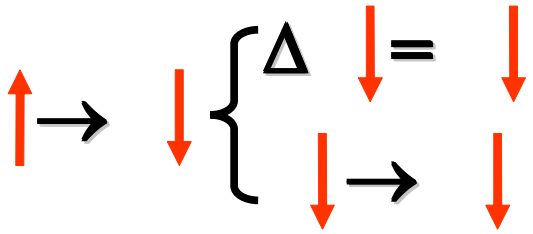
$= \quad c \quad = \quad ^{2} + \quad F$

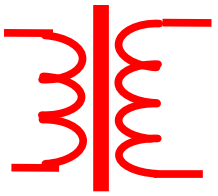
6.3

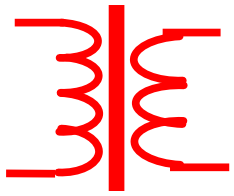
6.3.1

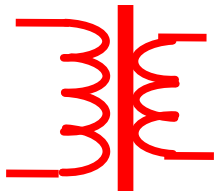
= c

c

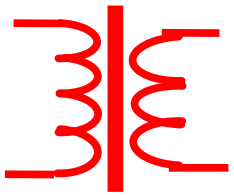


10.5kV  220kV

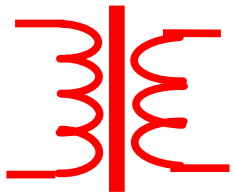


10kV 

…

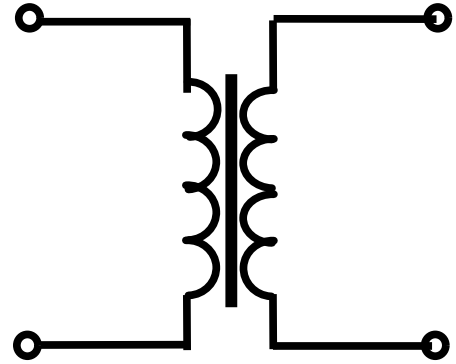


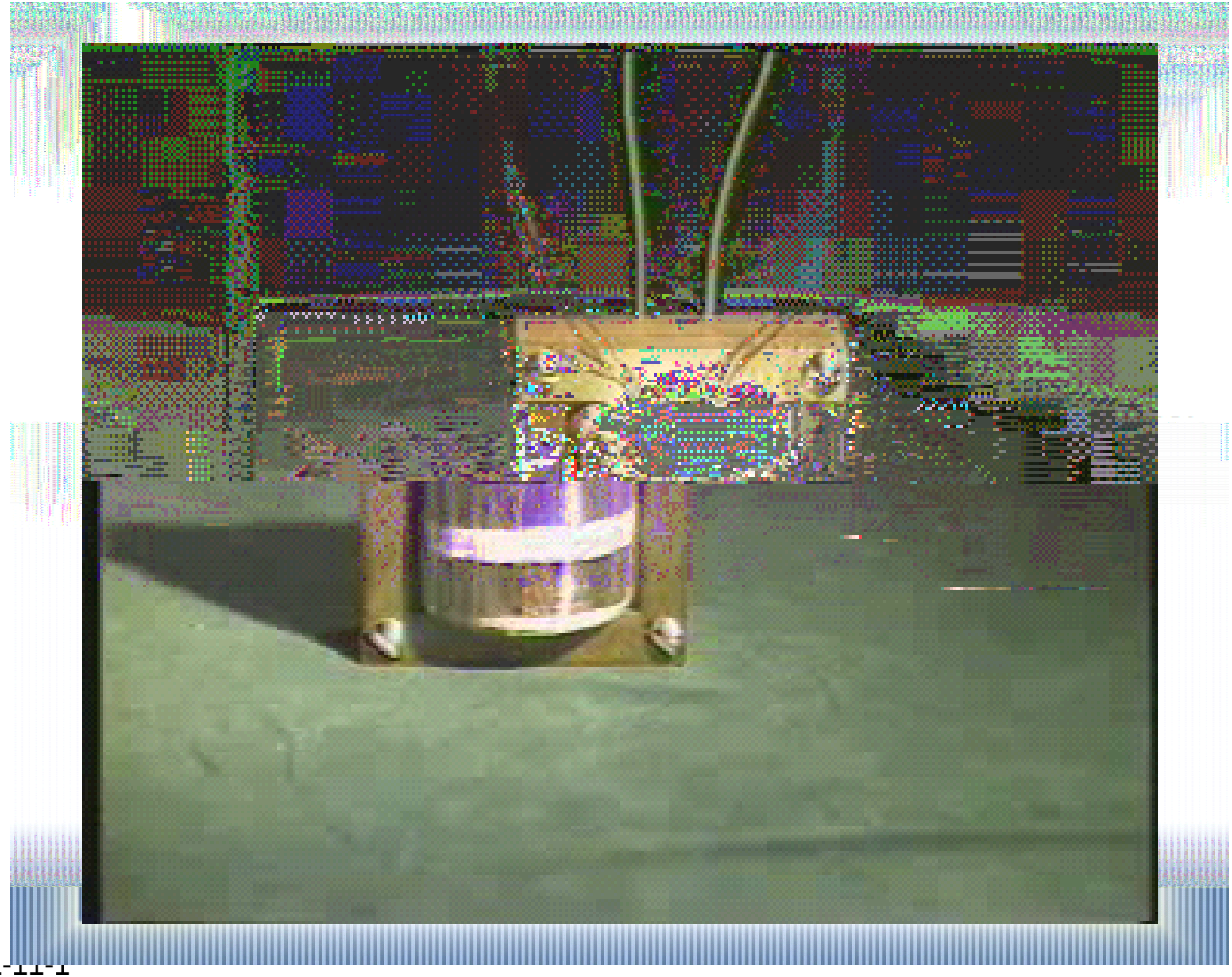
380/220V



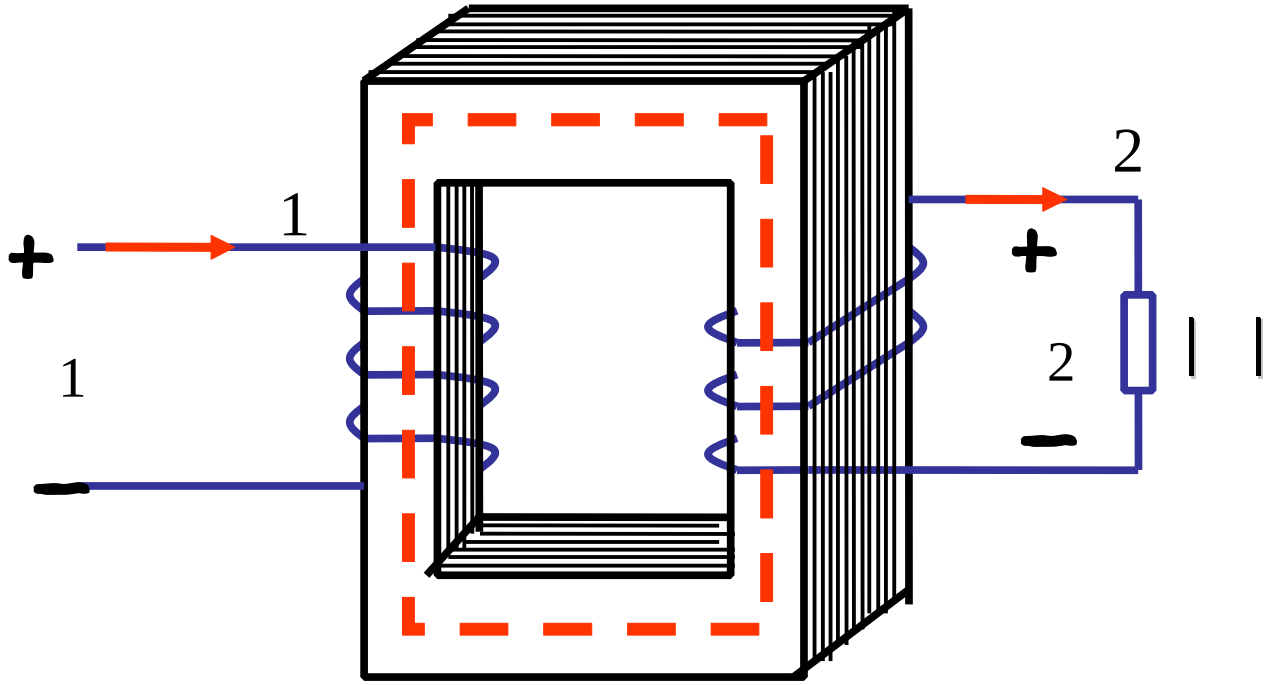
36V

1.



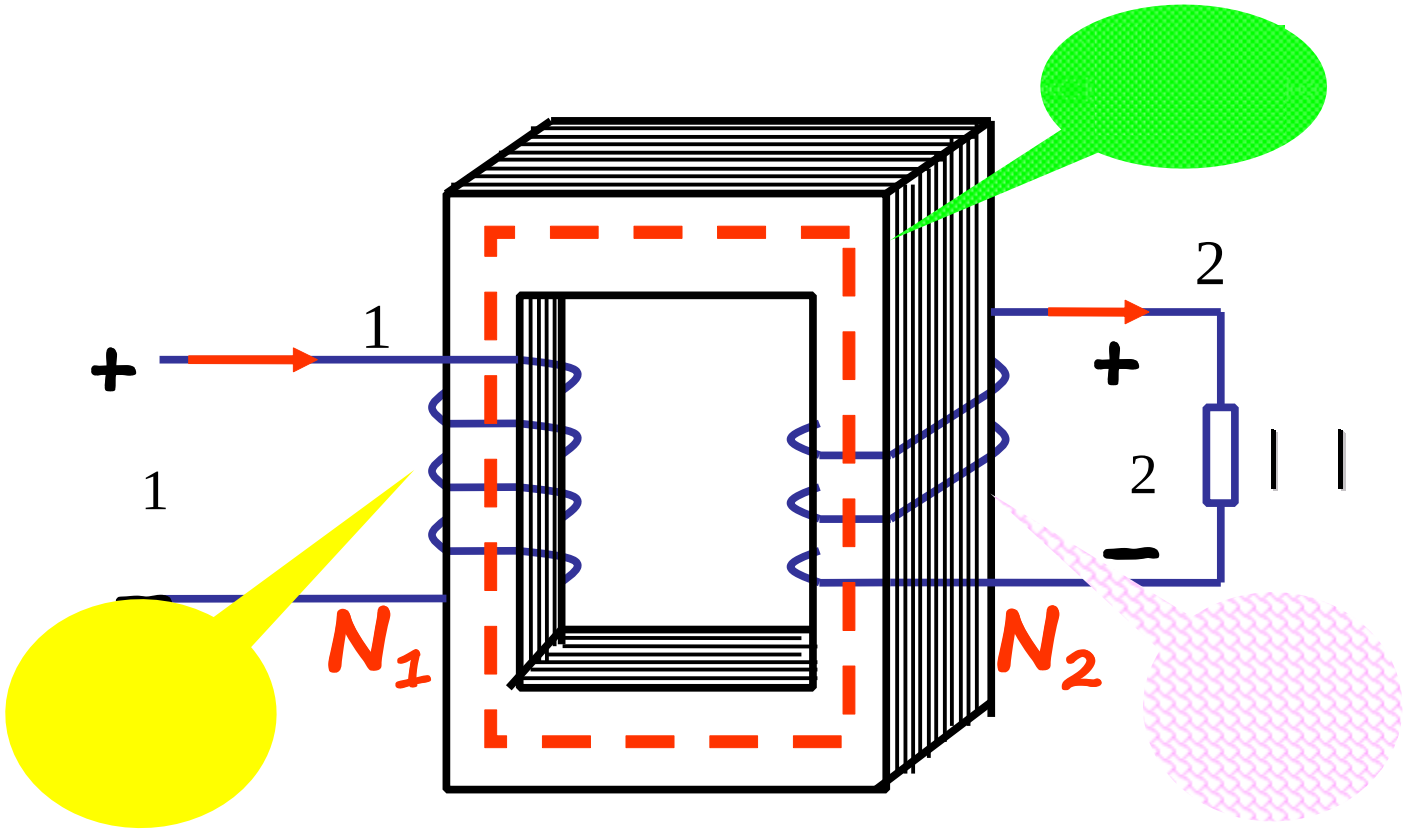


2.



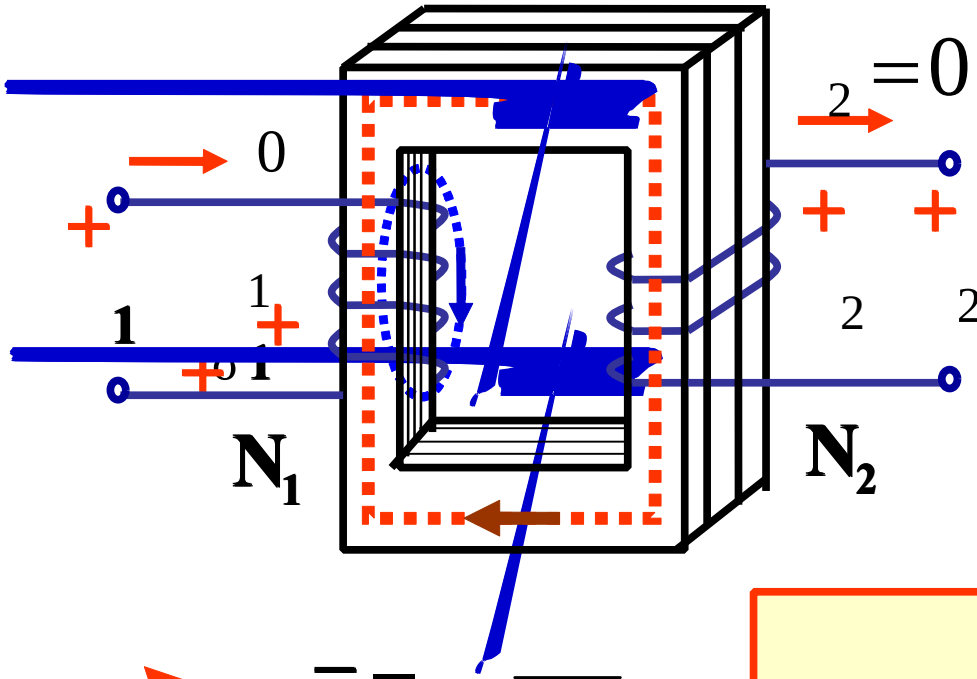
0.35mm　　0.5mm

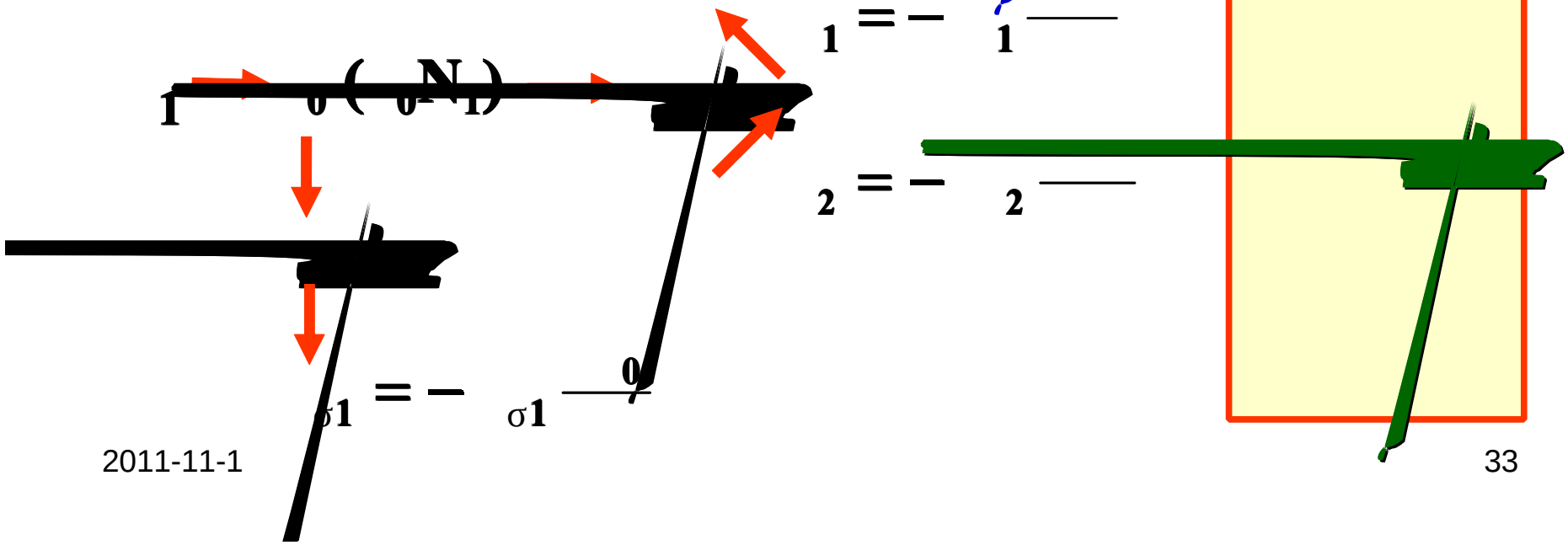
6.3.2



1.

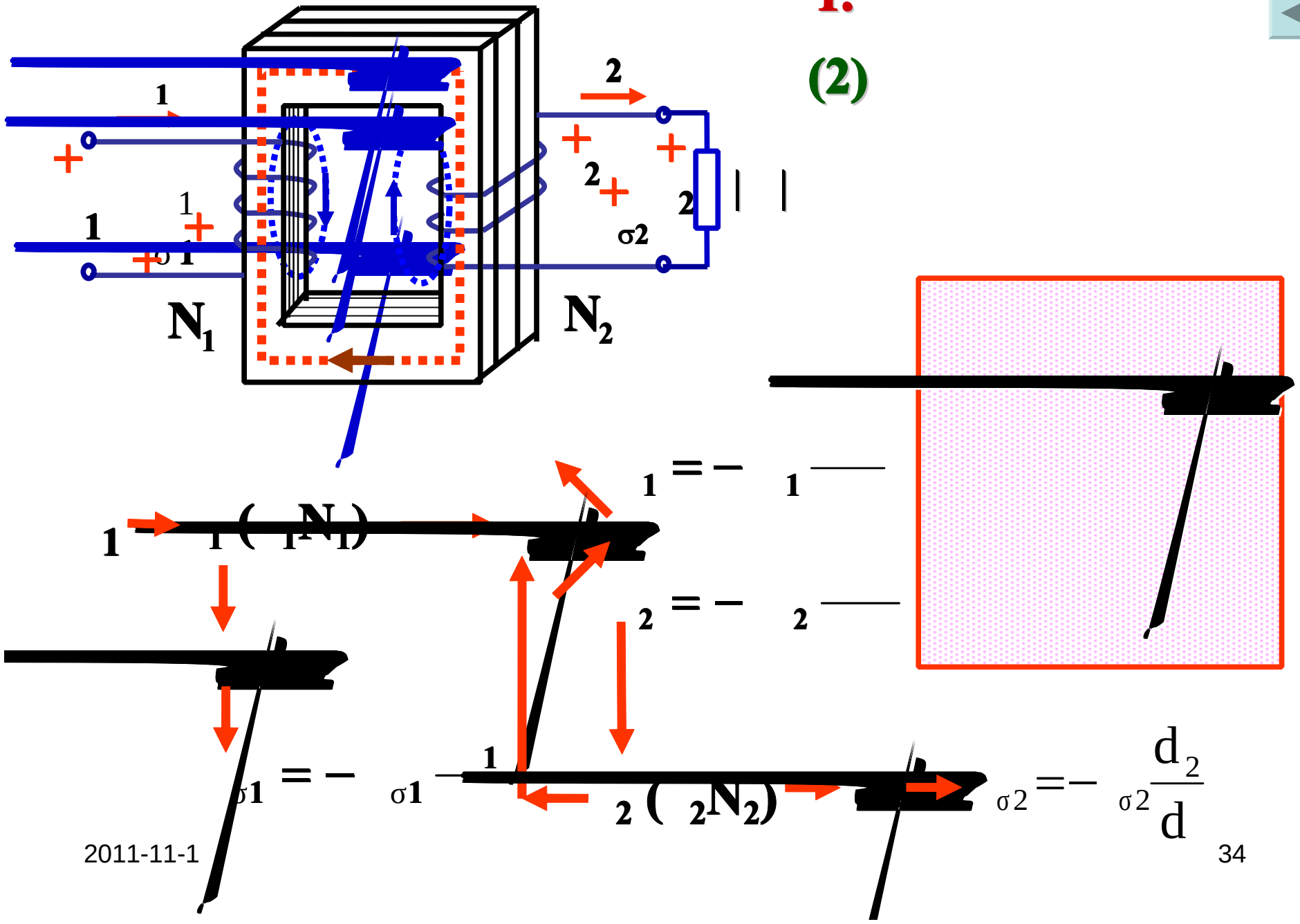
(1)





1.

(2)



2.

(1)

$$\Phi = \Phi \quad \sin$$

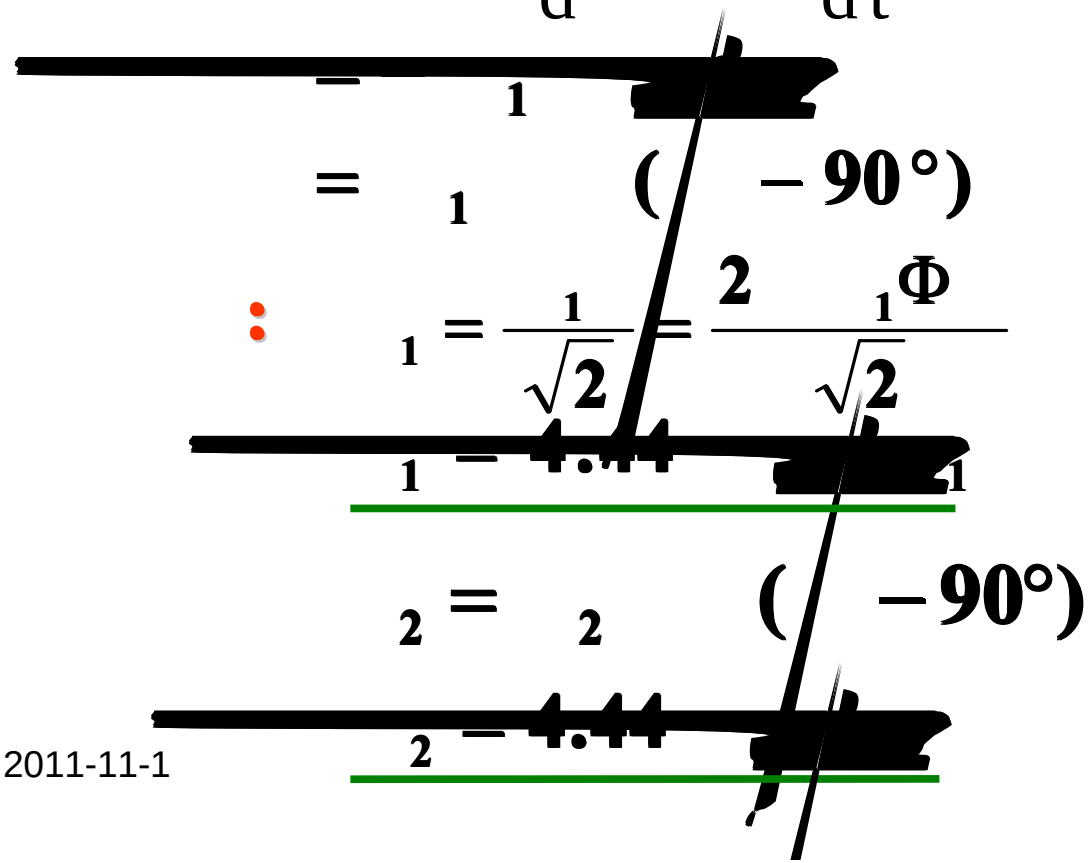
$$_1 = - \quad _1 \frac{d\Phi}{d} = - \quad _1 \frac{d}{dt}(\Phi_m \sin \quad)$$

$$= \quad _1 \quad (\quad -90°)$$

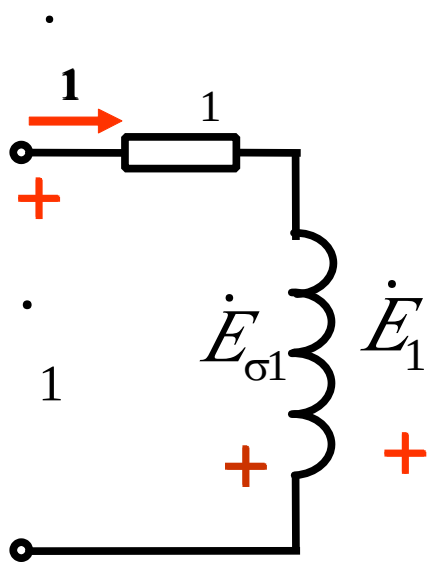
:

$$_1 = \frac{_1}{\sqrt{2}} = \frac{2 \quad _1\Phi}{\sqrt{2}}$$

$$_2 = \quad _2 \quad (\quad -90°)$$



(2)



KVL

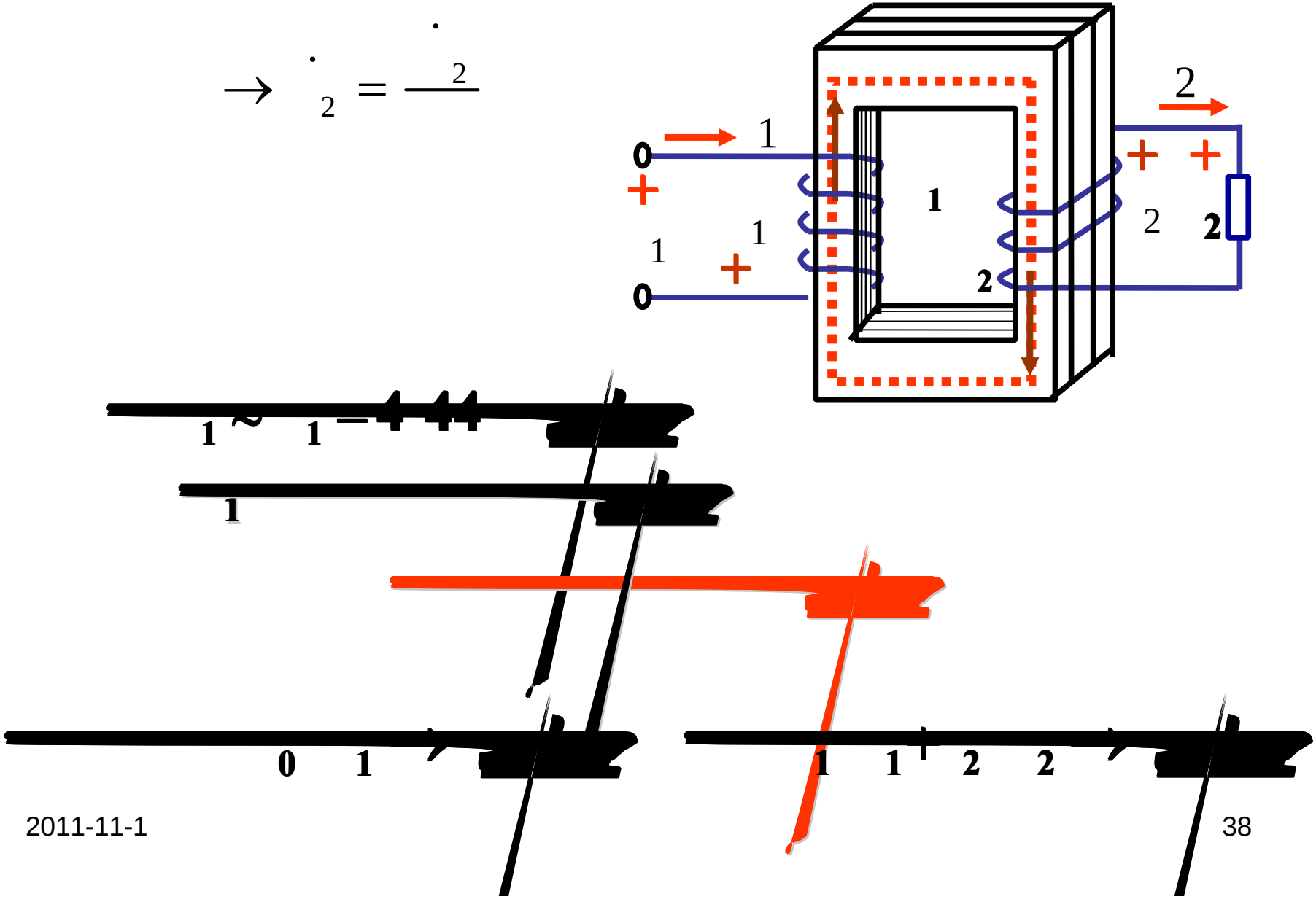
KVL

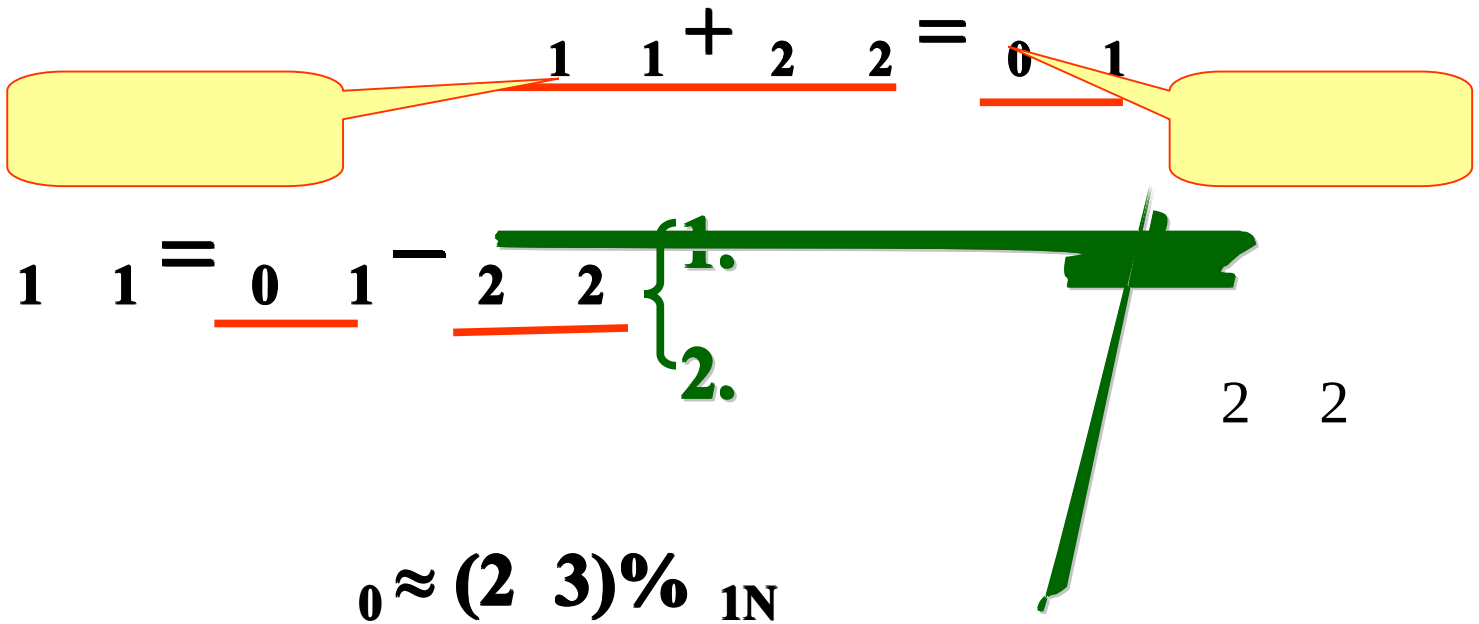
2

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

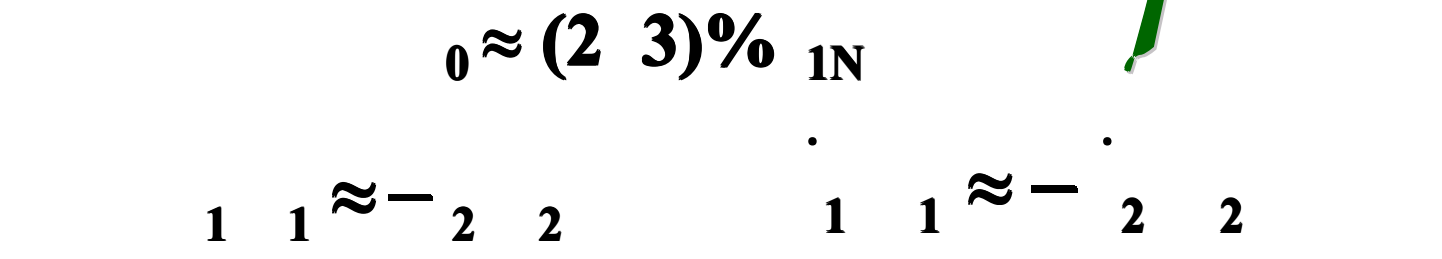
3. ( )

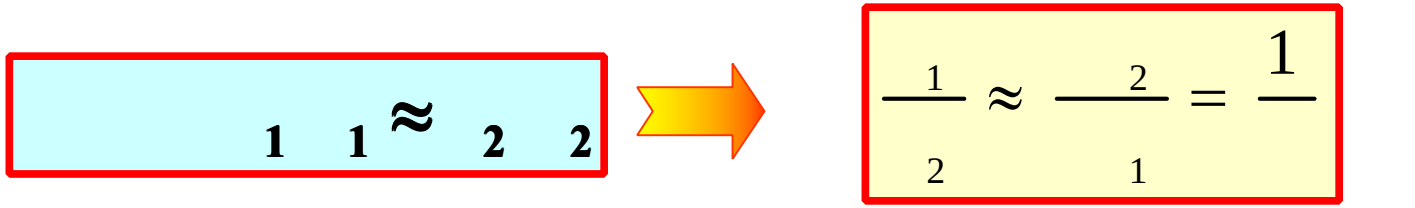
$\rightarrow$ $_2 = \frac{2}{}$



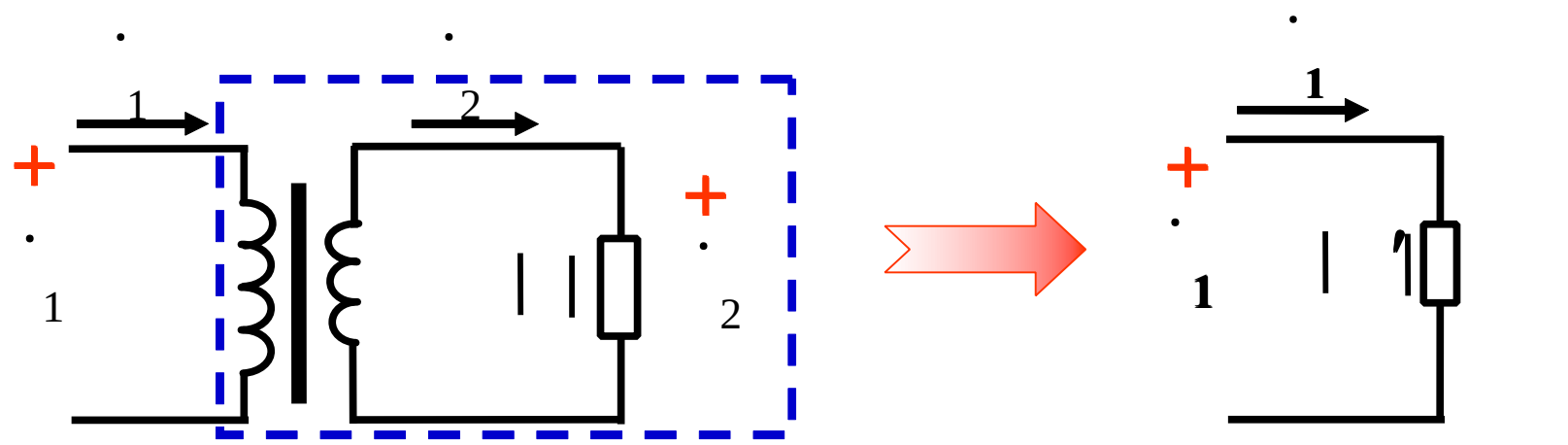


2 2





4.



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

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

$$|\ '| = \frac{1}{1} = \frac{2}{2} = {}^{2}\frac{2}{2} = {}^{2}|\ |$$

$$|\ '| = {}^{2}|\ |$$

2

1:

= 120V **$_0$=800**

Ω

=8Ω **: (1)** **L**

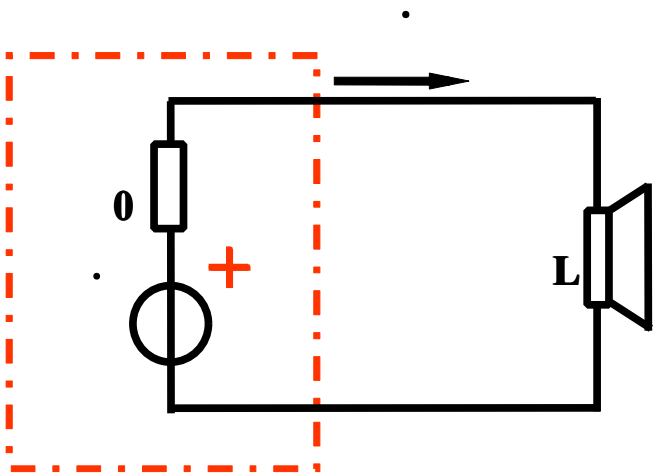
$$R' = R_0$$

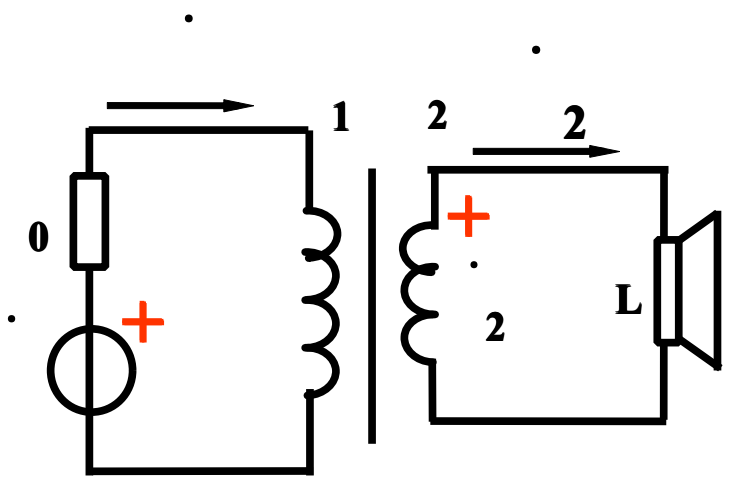
2

,

: (1)

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





$$= \left(\frac{\quad}{\quad_0 + \quad'_L} \right)^2 \times \quad'_L = \left(\frac{120}{800+800} \right)^2 \times 800 = 4\,5\ \mathrm{W}$$

2

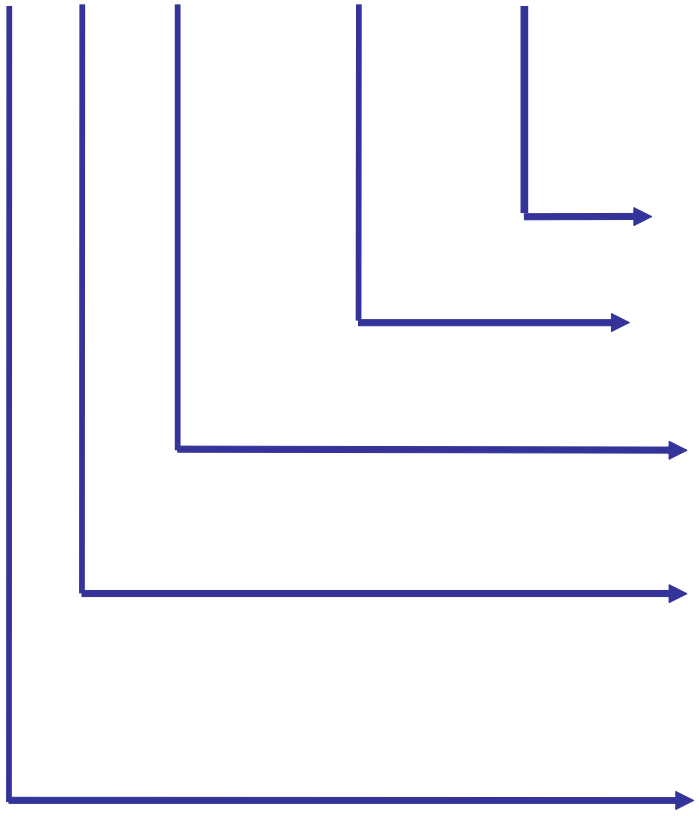
$$= \left(\frac{\quad}{\quad_0 + \quad_L} \right)^2 \quad_L = \left(\frac{120}{800+8} \right)^2 \times 8 = 0\,176\ \ \mathrm{W}$$

$$\quad'_L = \quad_0$$

5.

1)

S J L —1000/10



(V)

(VA)

J:

F:

S:

D:

2)

1N　　2N

1N

2N

1N　　2N

1N　　2N

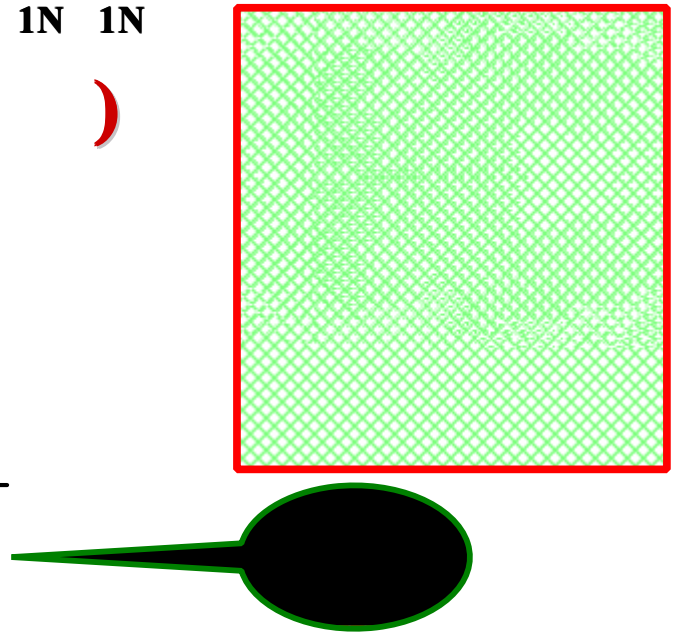
2)

N

$$\begin{cases} {}_{N} = {}_{2N}\ {}_{2N} \approx {}_{1N}\ {}_{1N} \\ {}_{N} = \sqrt{3}\ {}_{2N}\ {}_{2N} \approx \sqrt{3}\ {}_{1N}\ {}_{1N} \end{cases}$$

( )

$$\begin{cases} {}_{N} = {}_{1N} \times {}_{1N} \\ {}_{2} = {}_{2}\ {}_{2}\ c \\ {}_{1} = \frac{2}{} \end{cases}$$

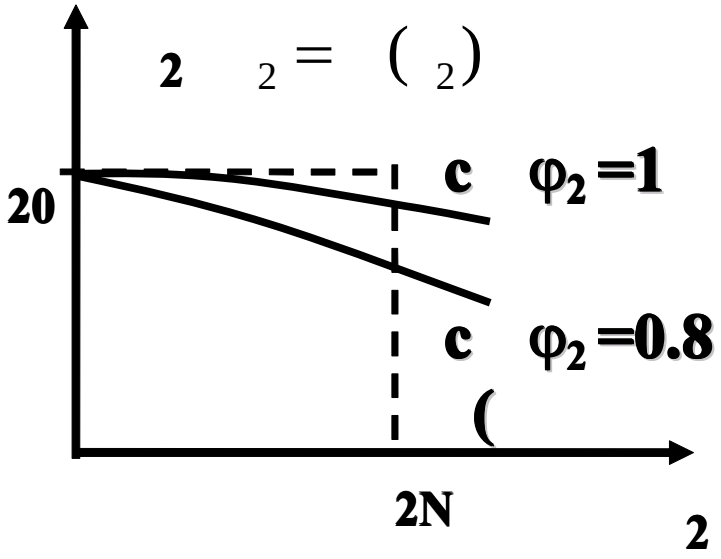


$N \neq 2$

$1 \neq 2$

6.3.3

1.



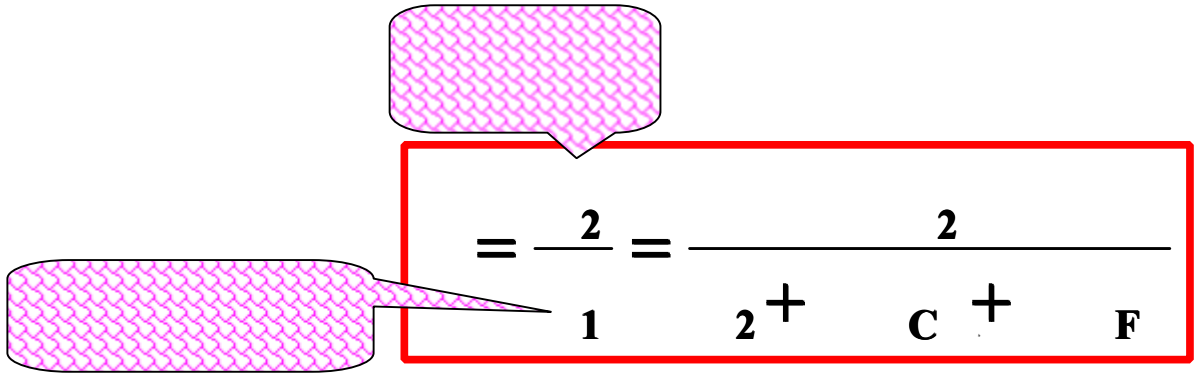
$$\Delta\ \% = \frac{20 - 2}{20} \times 100\ \%$$

5%

2.

(Δ_C)

(Δ_F)



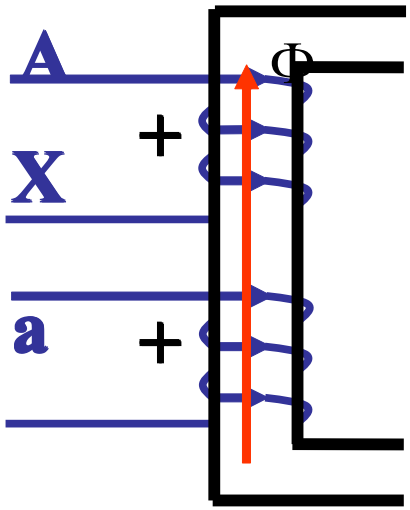
95% , (50 75)% ,

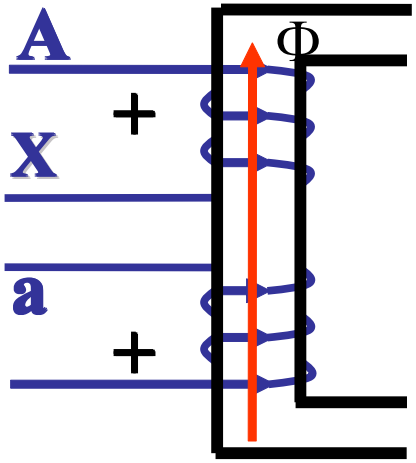
6.3.4

1. **( )**

(

(

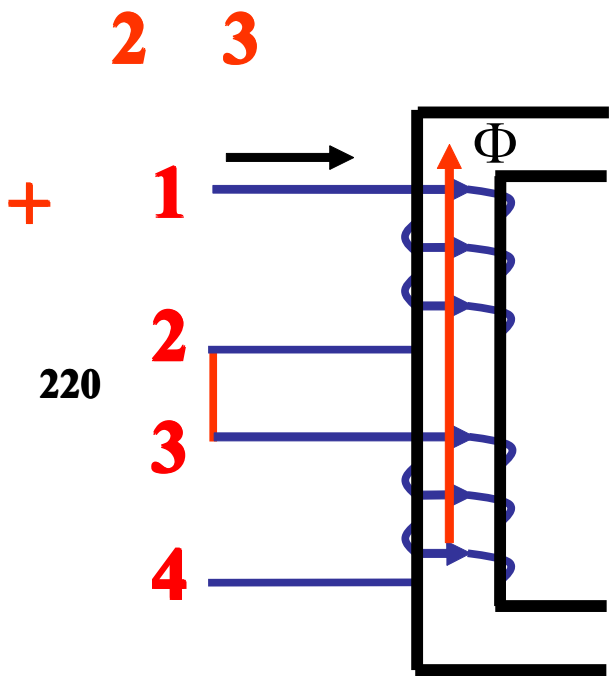




2.

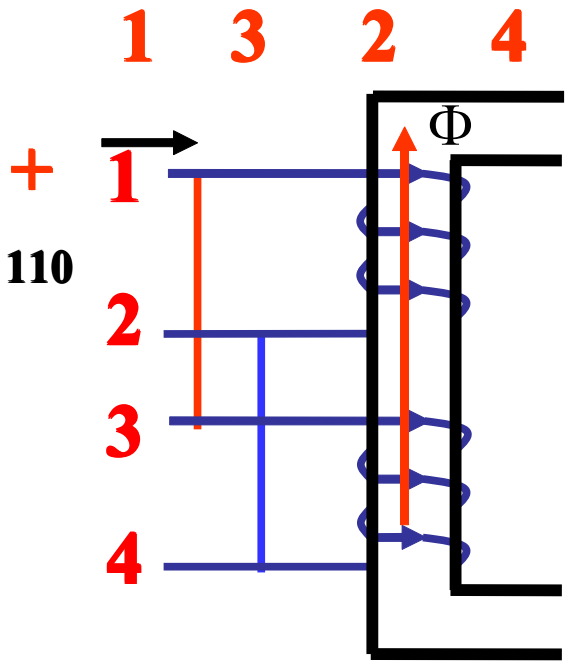
110V

220V



$$= \frac{220}{4.44\ (2\quad)}$$

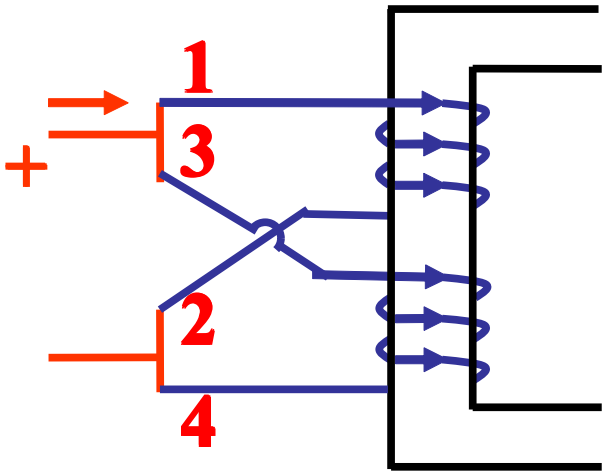
110V



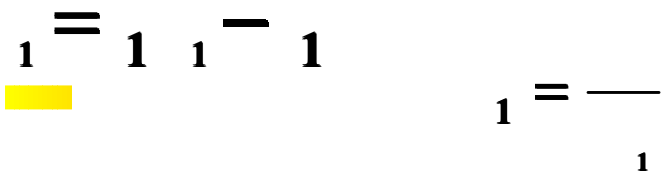
$$= \frac{110}{4.44\ (\quad)}$$

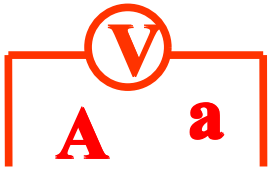
(220/110)

1　　110V



2





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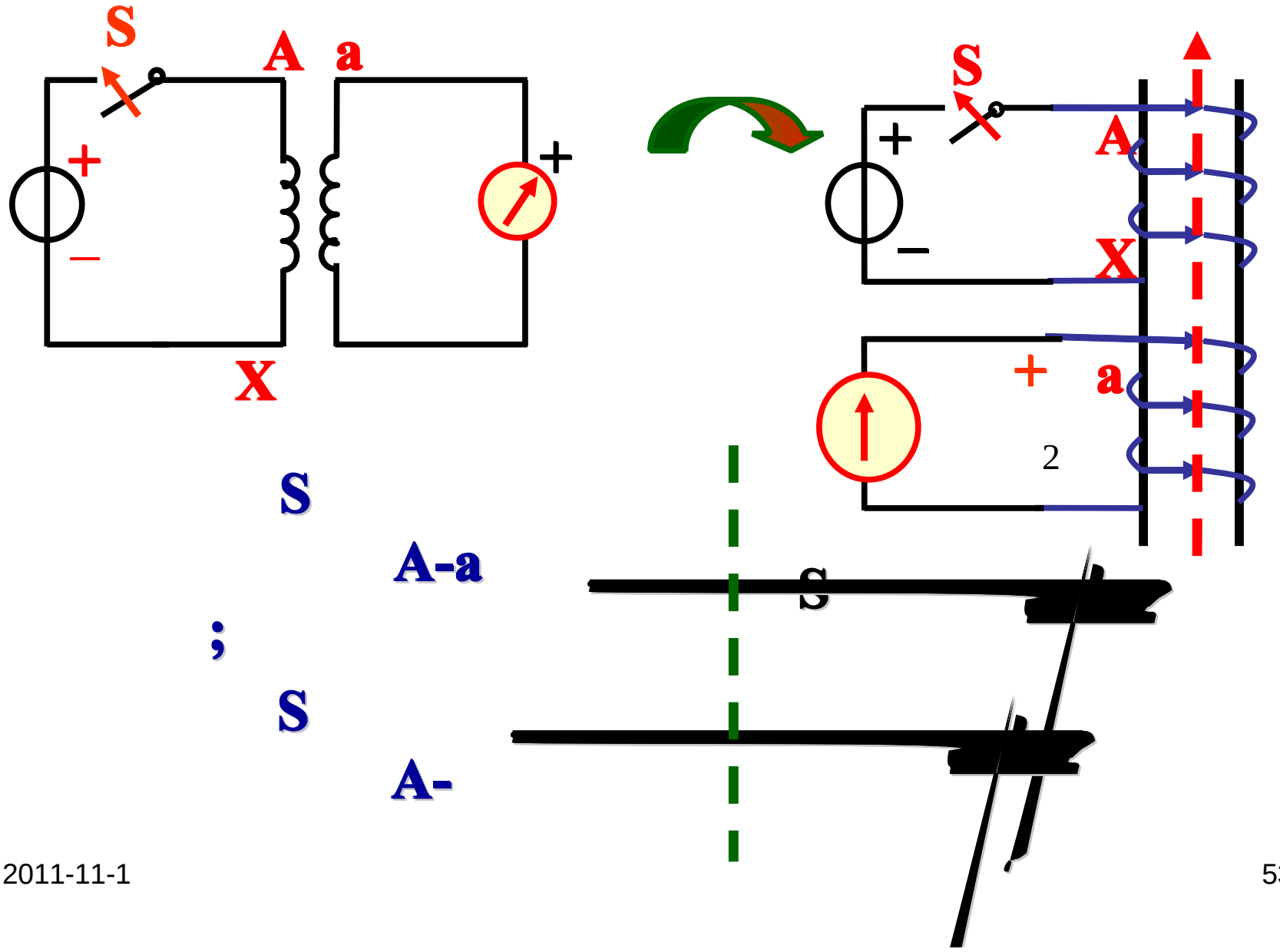
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6.3.5

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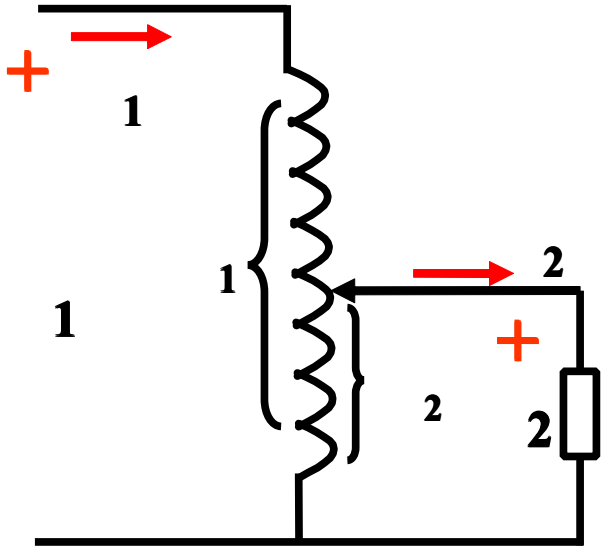
$$\frac{\dot{U}_1}{\dot{U}_2} = \frac{\dot{I}_2}{\dot{I}_1} = \frac{1}{\quad}$$



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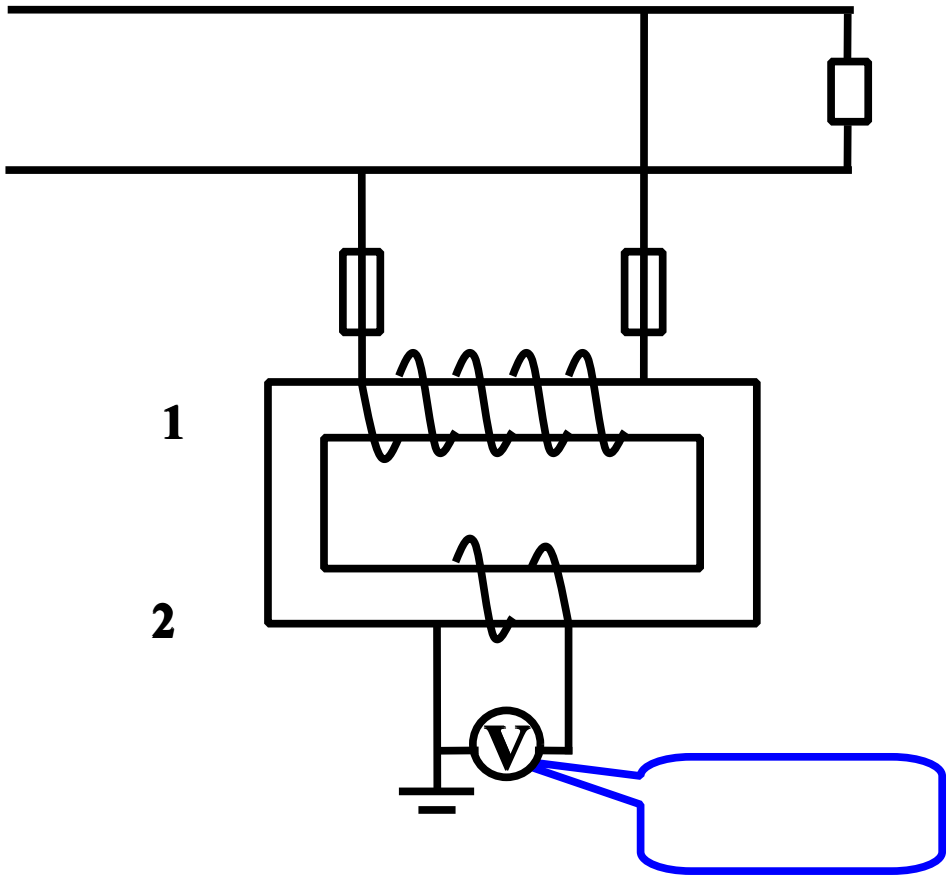

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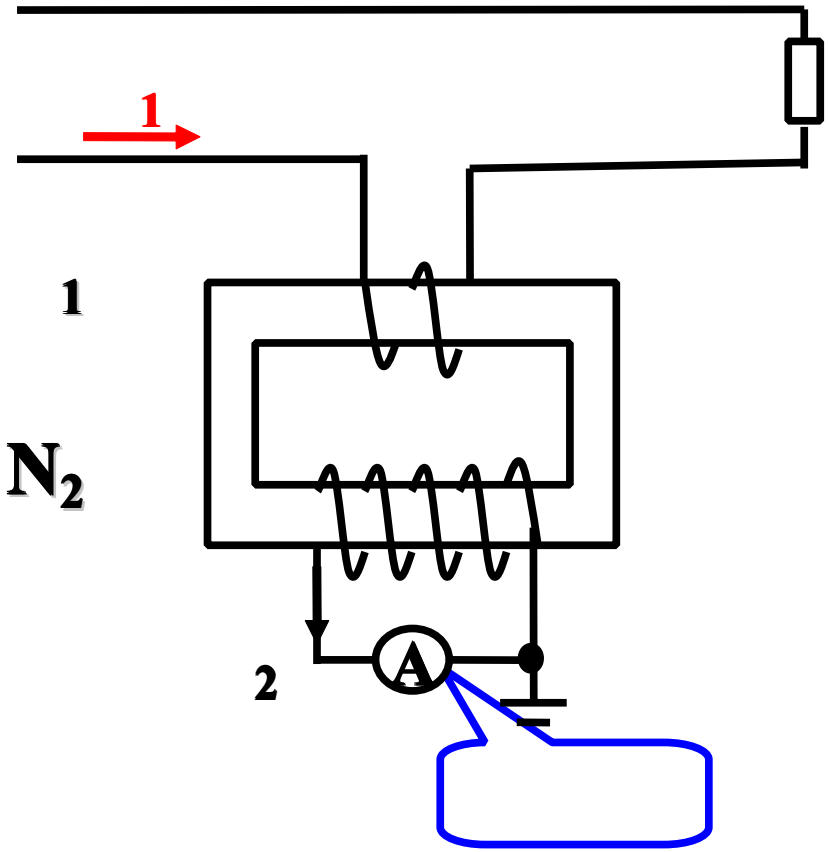

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