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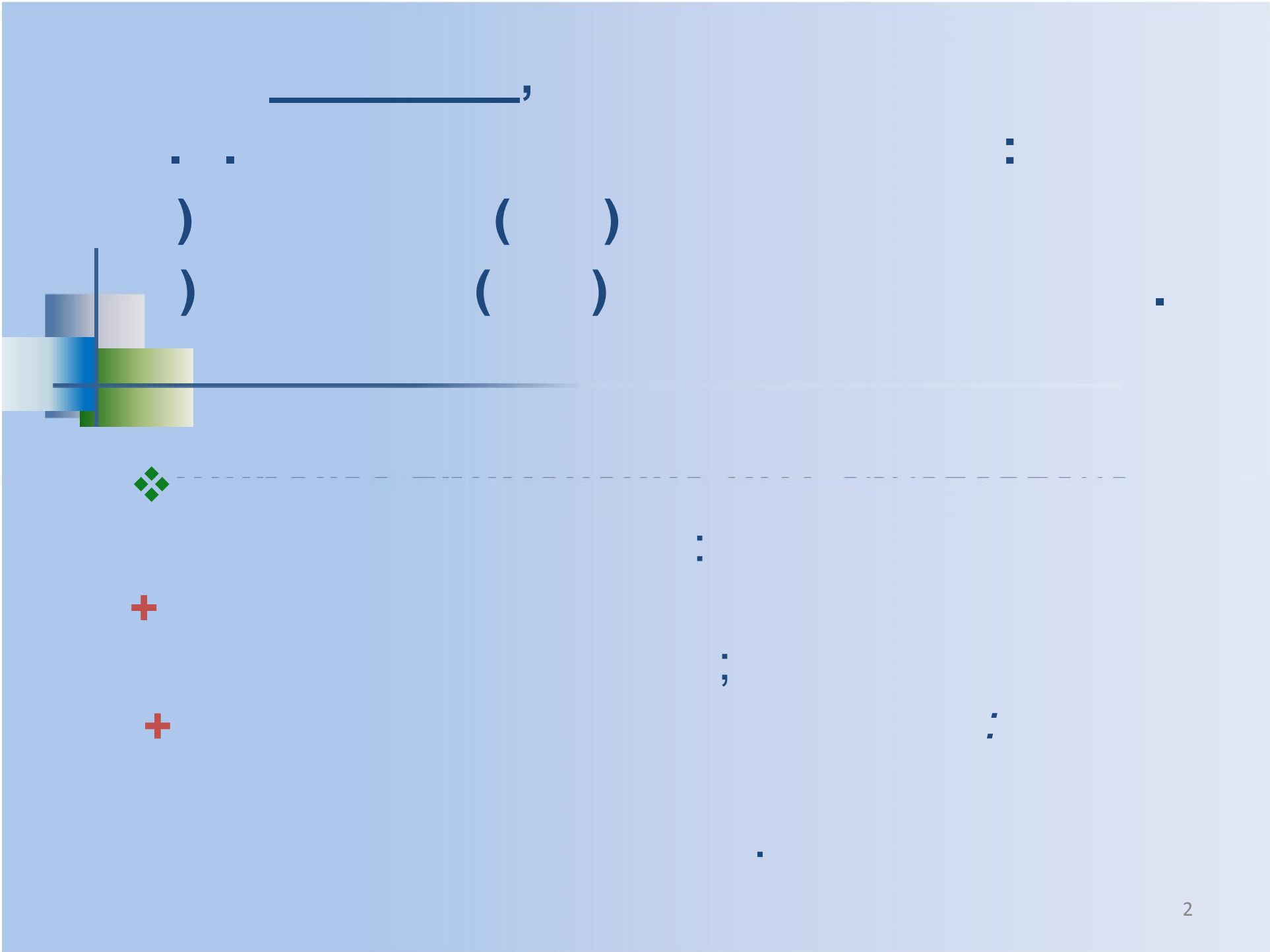
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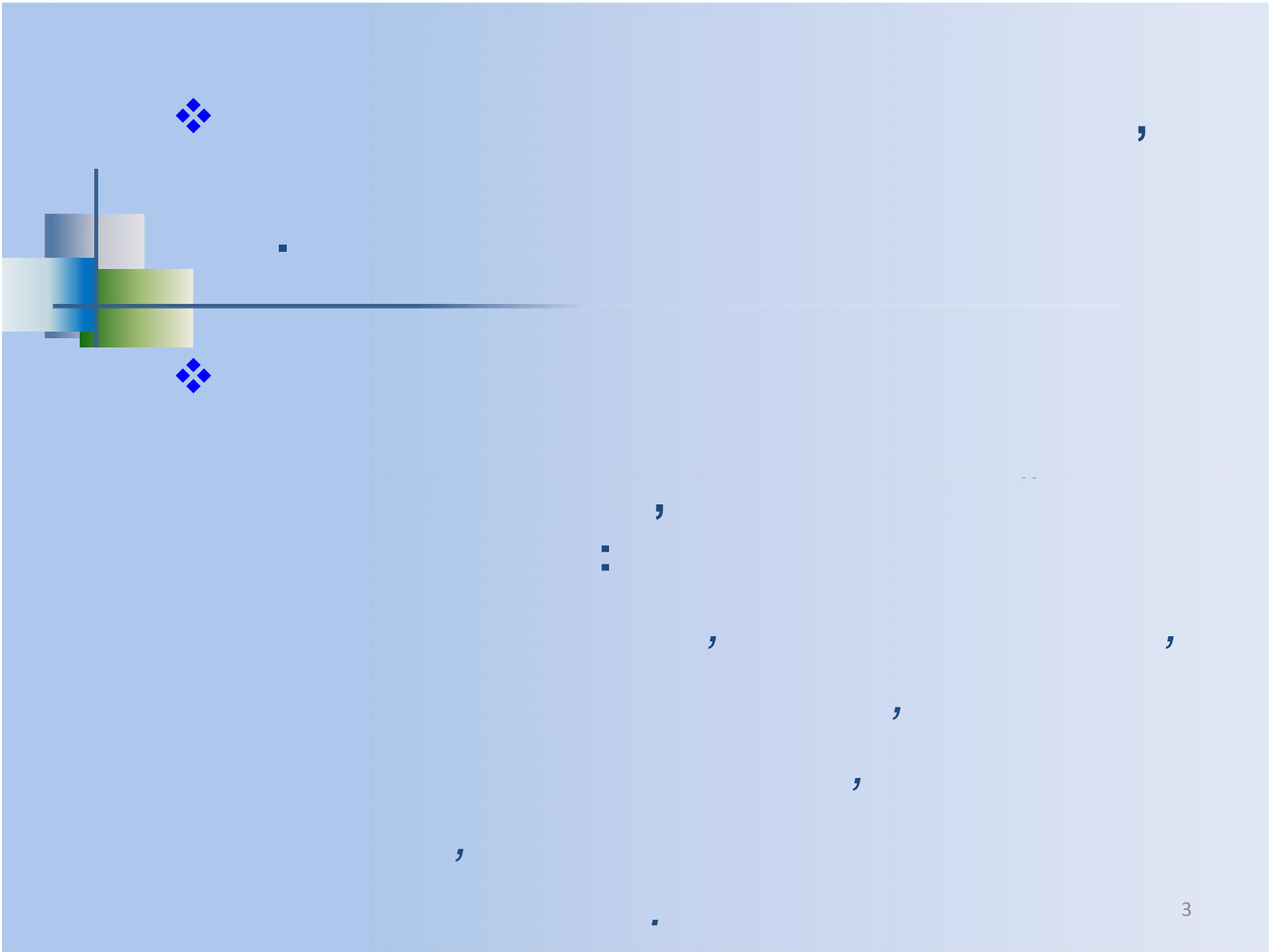


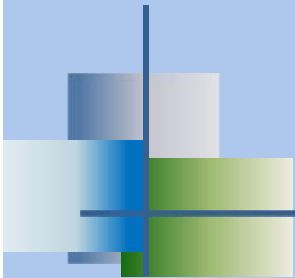
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$$\frac{0,37 \cdot 2 \cdot 12500}{32 \cdot 4000} / \frac{4}{},$$

220

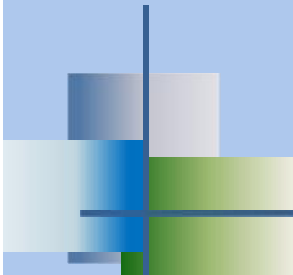
440 ;



$$\frac{115,230 \cdot 2 \cdot 460}{0,37 \cdot 180} =$$

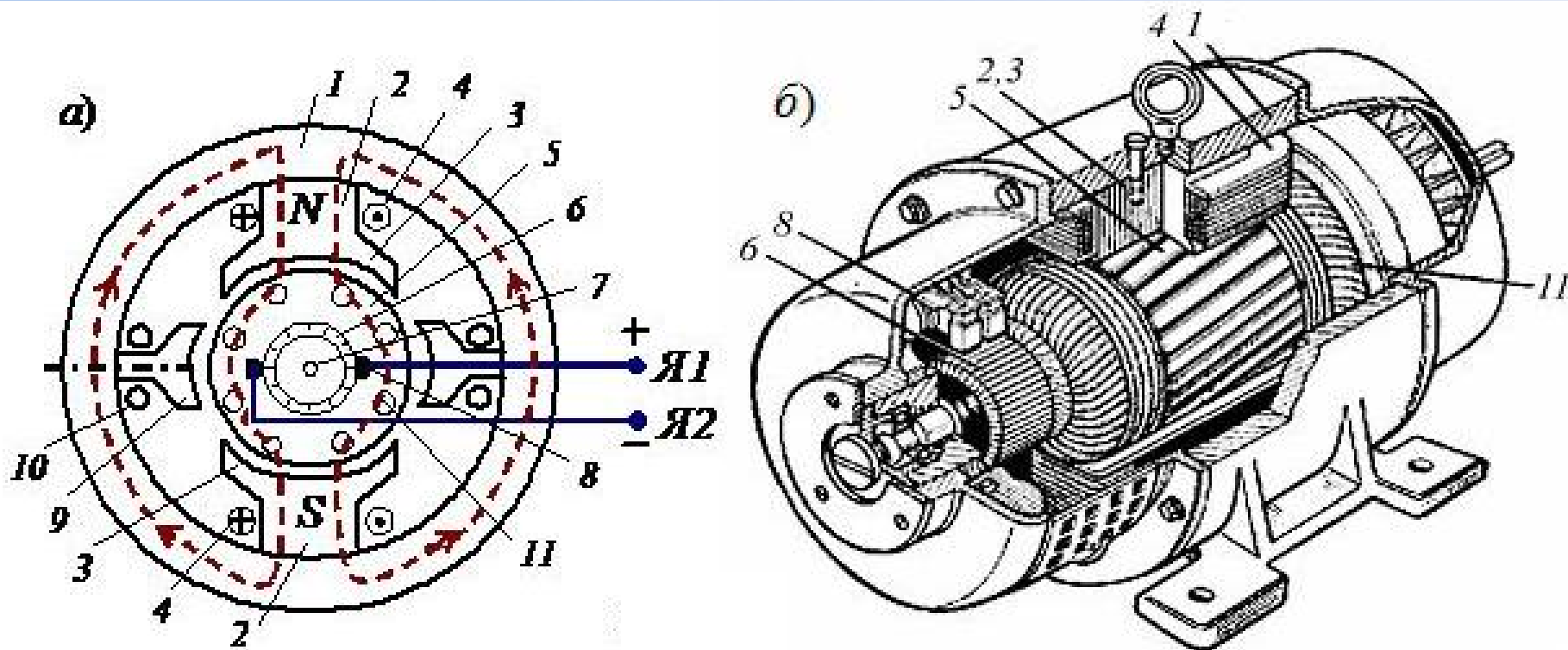
0,6...0,9.

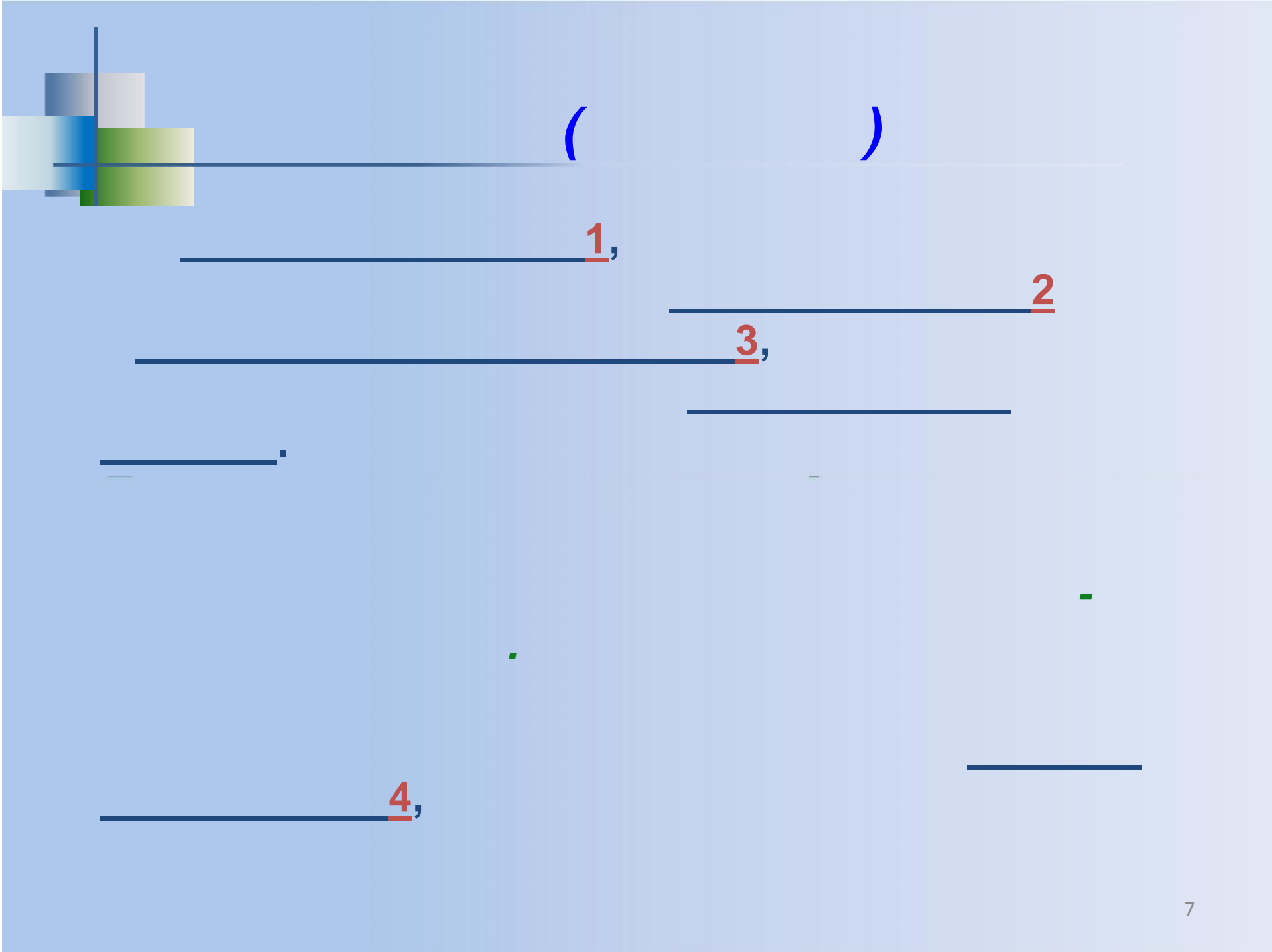




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(0,3...0,5).





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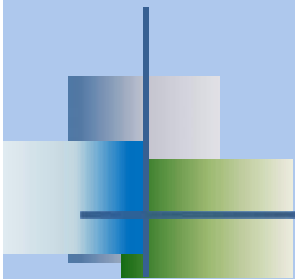
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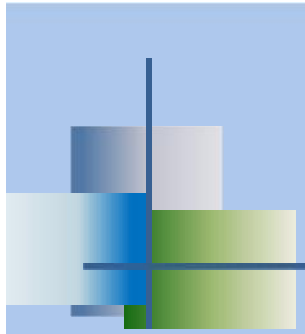
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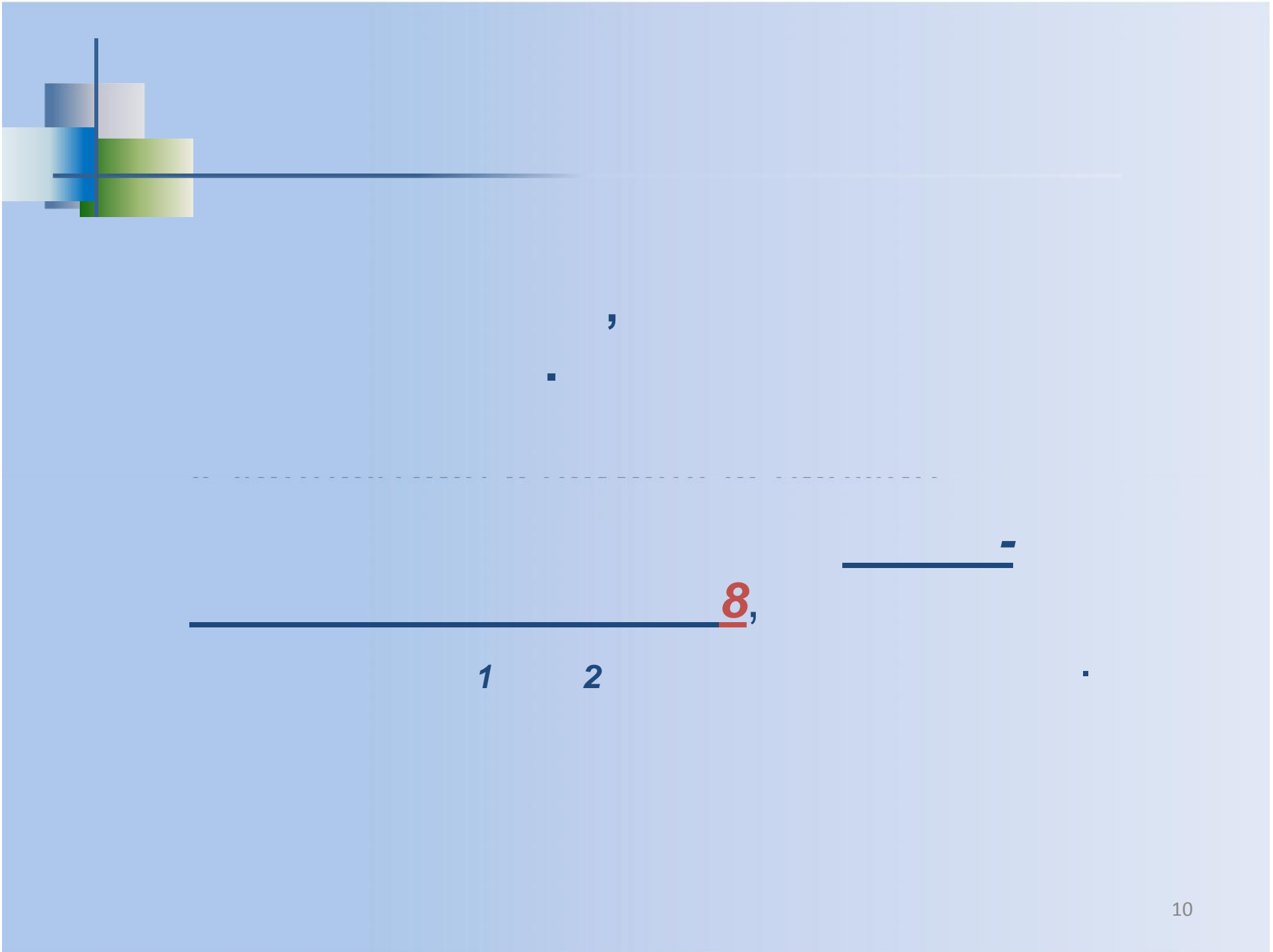
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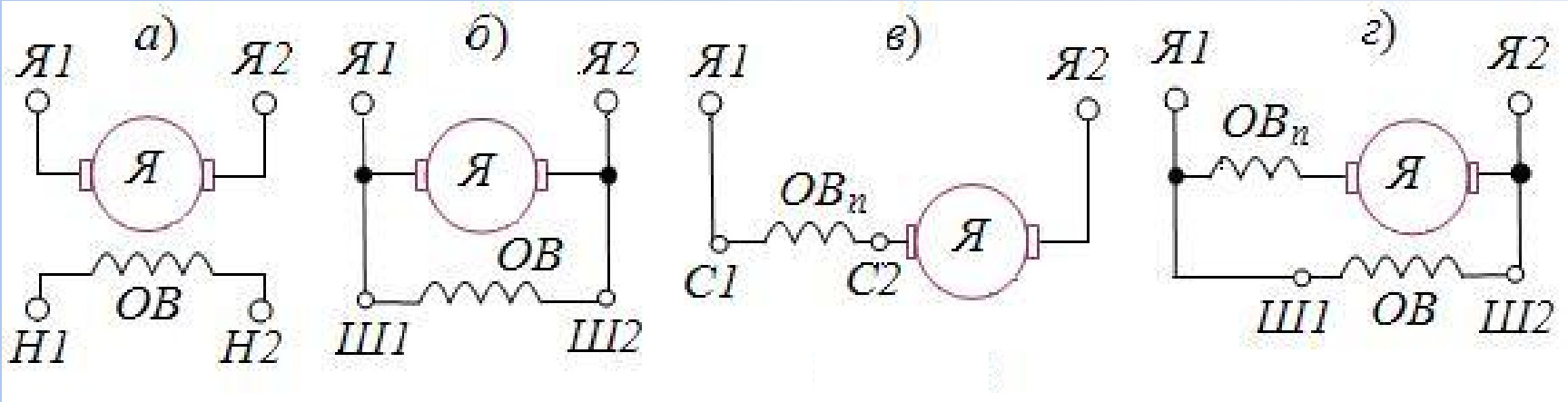


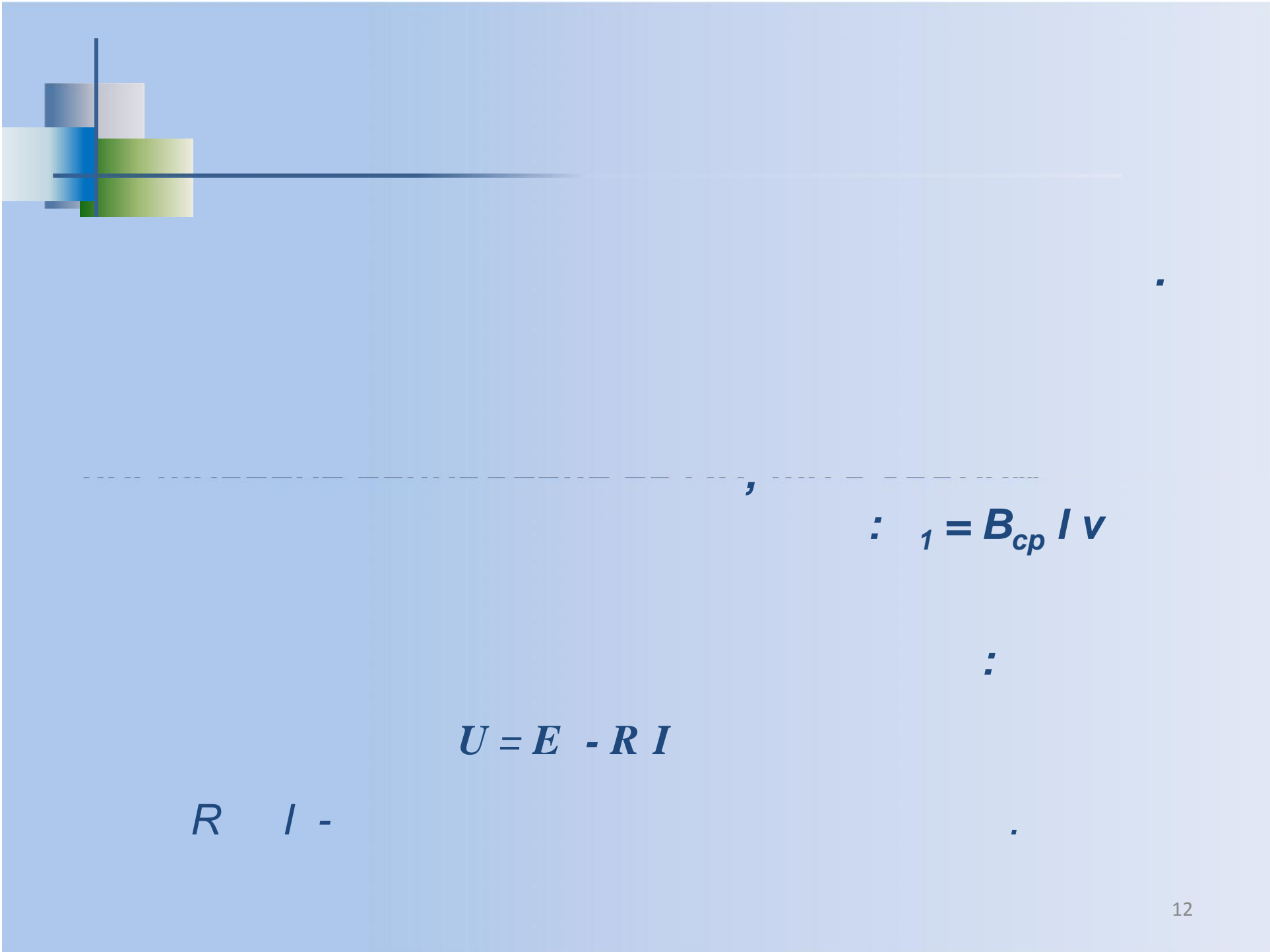
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- _____ () 11.
- _____ 6 (_____ ,
- 7, _____).





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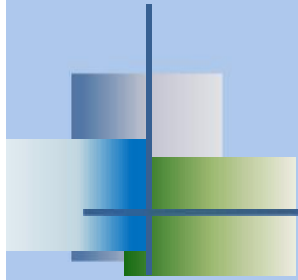


$$: \quad \dot{\varphi}_1 = B_{cp} I v$$

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$$U = E - R I$$

$$R \quad I -$$



➤
 $= \text{const}; I = 0)$

$$E = Ux = f(I) \quad (n$$

,
 $R,$

.....
 E

➤
 $U = f(I),$

$$I \quad n = \text{const}$$

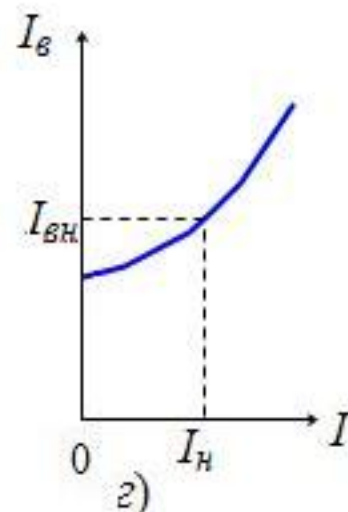
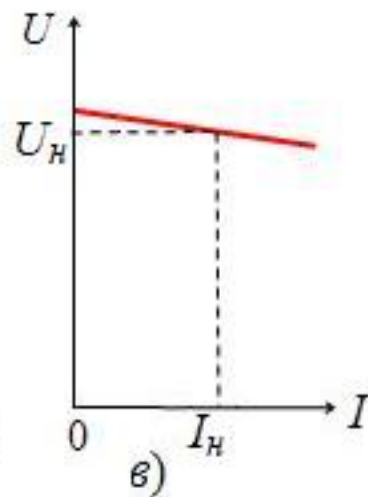
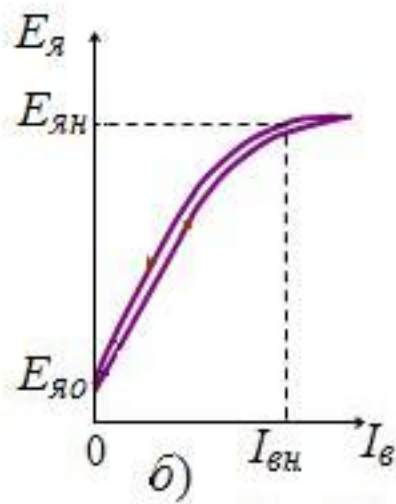
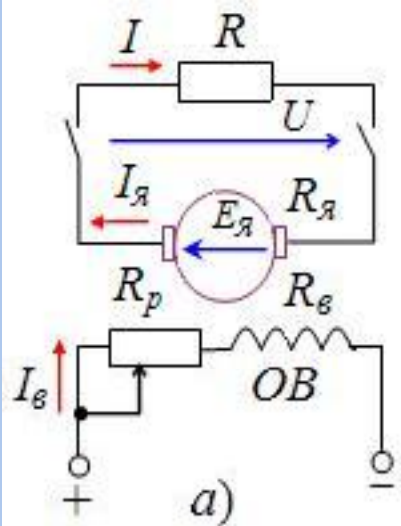
$I = \text{const}.$

➤
 $\text{const} \quad U = \text{const}.$

$$I = f(I) \quad n =$$

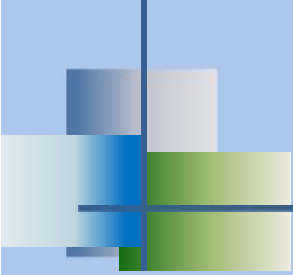
$I,$
 U

(I).



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Принцип работы двигателя постоянного тока ()



U

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$$U = E + IR,$$

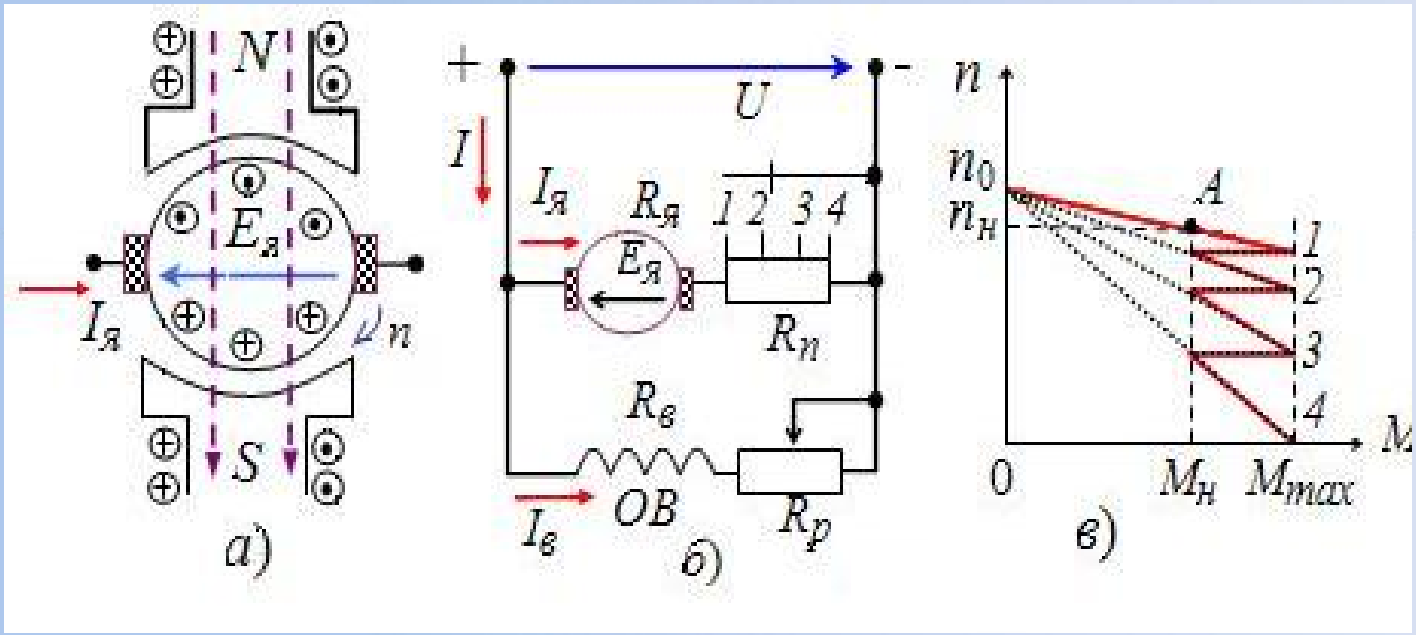
$I,$

$$= UI = + I^2 R,$$

$$= EI = \text{w} - I^2 R -$$

$R ,$

$R .$



$$: I = U / (R + R_p),$$

$$: I = (U - E) / R + R$$



n

$= 0,$

-

$= 0$

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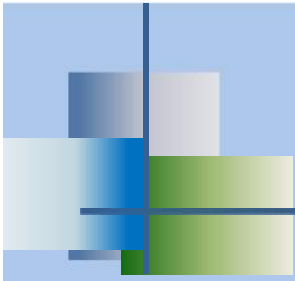
$R,$

$I = U / (R + R) < (2...2,5)I$, $I -$



$= (2...4)$.

$n = n , Rn = 0.$



(1), (R = 0)



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) (-



➤ _____ -

$$(R + R = var);$$

➤ _____ - -----

$$(R + R = var);$$

➤ _____ - ,

$$(U = var).$$

