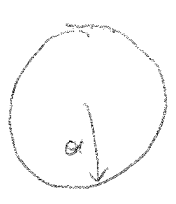
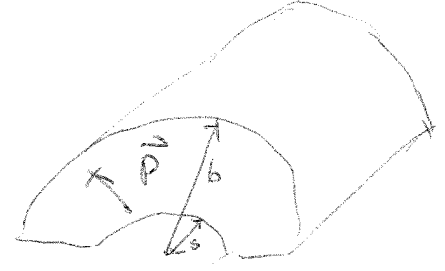





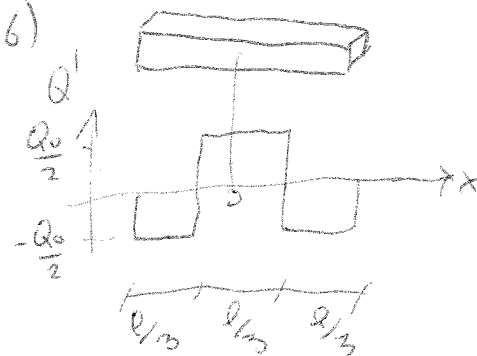
1)  $\vec{r} \times \left\{ \vec{D} \times [F(y)\vec{r}] \right\}$   $\vec{r} \dots$  Ortsvektor kart.

2)  $\int_{\partial V} \vec{n} \cdot [ \vec{F} \times (\vec{D} \times \vec{G}) - \vec{G} \times (\vec{D} \times \vec{F}) ] dA$   
 $\rightarrow$  Vol. Int.

3)   $\varphi(a, \alpha) = U \cdot \cos 3\alpha$   
 zylinder  
 ges:  $\varphi(r, \alpha)$   $r \geq a$

4)   $\vec{P} = P \vec{e}_s$   
 sonst ungeladen  
 ges Moment  $\vec{P}$

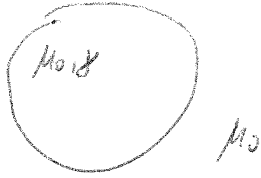
5)   $\vec{P} = P \vec{e}_r$   
 ges:  $\vec{T} = \vec{p} \cdot \vec{\nabla} \vec{E}$   $\vec{T} = \vec{p} \times \vec{E}$   
 (ii)  $\vec{p} = \epsilon_0 d \vec{E}$

6)   $Q'$   
 $\frac{Q_0}{2}$   
 $-\frac{Q_0}{2}$   
 $\frac{Q_0}{3}$   $\frac{Q_0}{3}$   $\frac{Q_0}{3}$   
 ges:  $Q, \mathcal{M}$  von Ort und Zeit

$$7) \vec{J} = \frac{I_0}{\pi} \frac{\rho z e_r + (\omega^2 + z^2) e_z}{(\rho^2 + z^2)^{3/2}}$$

ges:  $\vec{H}$

8) Nagel



$\vec{J} \gg \omega$

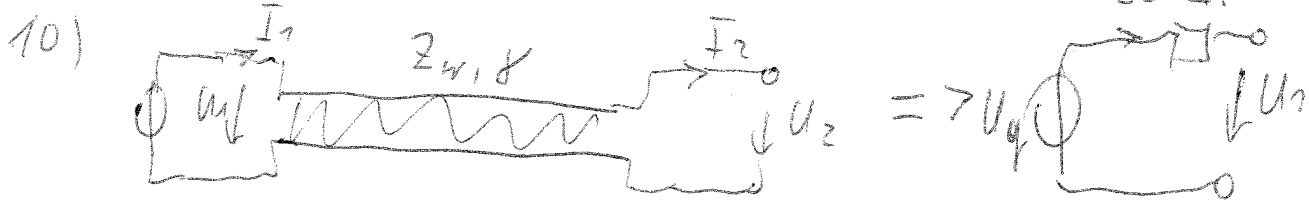
$$\uparrow \uparrow \uparrow B(A) = B_0 \cos \omega t$$

ges: Mittelwert Wirbelstromverluste

$$9) \vec{E} = E_0 \sin \frac{\pi x}{a} \cdot \sin \frac{\pi y}{a} \cdot \cos \omega t \vec{e}_z$$

Quader:  $a \times a \times L = 10 \text{ mm} \times 10 \text{ mm} \times 20 \text{ mm}$

ges:  $\oint, \vec{H}$



ges:  $U_q, Z_i$