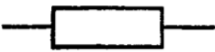
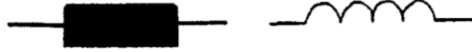

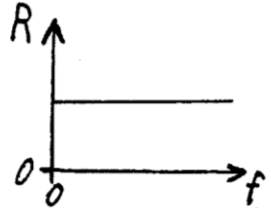
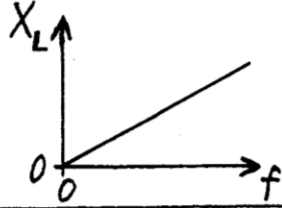
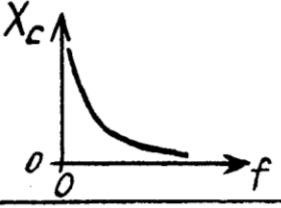

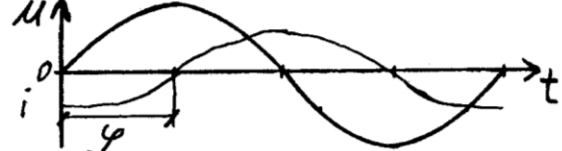
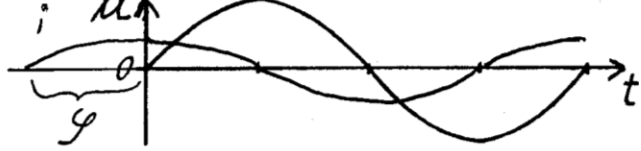
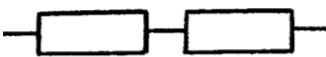


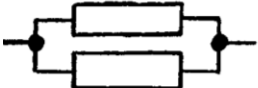

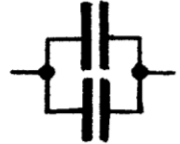


Ohmscher Widerstand	Induktiver Widerstand	Kapazitiver Widerstand
Widerstand 	Spule 	Kondensator 
$R = \frac{U}{I}$ $[R] = \frac{V}{A} = \Omega, \text{ Ohm}$	$L = \frac{U_{\text{ind}}}{\dot{I}}$ $[L] = \frac{Vs}{A} = H, \text{ Henry}$	$C = \frac{Q}{U}$ $[C] = \frac{C}{V} = F, \text{ Farad}$
Widerstand $R = \frac{\rho l}{A}$	Induktivität $L = \frac{\mu_0 \mu_r N^2 A}{l}$ $H = \frac{l \cdot N}{L}$	Kapazität $C = \frac{\epsilon_0 \epsilon_r A}{d}$ $E = \frac{U}{d}$
$R \neq f(f)$ $R_- = R_{\sim}$ 	$X_L = \omega L$ $X_{L-} = 0$ 	$X_C = \frac{1}{\omega C}$ $X_{C-} = \infty$ 
 <p>Es tritt keine Verschiebung zwischen Spannung und Strom auf. Strom und Spannung sind „in Phase“.</p> <p>Phasenverschiebung $\varphi = 0 \rightarrow U$</p>	 <p>Die Spannung erreicht <u>vor</u> der Stromstärke ihr Maximum. Der Strom eilt der Spannung um <u>90° nach</u>.</p> <p>$\varphi = -\frac{\pi}{2} = -90^\circ \downarrow i \rightarrow U$</p>	 <p>Die Spannung erreicht <u>nach</u> der Stromstärke ihr Maximum. Der Strom eilt der Spannung um <u>90° voraus</u>.</p> <p>$\varphi = \frac{\pi}{2} = 90^\circ \uparrow i \rightarrow U$</p>
Reihenschaltung  $R_g = R_1 + R_2$	$L_g = L_1 + L_2$ $X_{Lg} = X_{L1} + X_{L2}$ 	$\frac{1}{C_g} = \frac{1}{C_1} + \frac{1}{C_2}$ $B_{Cg} = B_{C1} + B_{C2}$ 
Parallelschaltung  $\frac{1}{R_g} = \frac{1}{R_1} + \frac{1}{R_2}$ $G_g = G_1 + G_2$	$\frac{1}{L_g} = \frac{1}{L_1} + \frac{1}{L_2}$ $B_{Lg} = B_{L1} + B_{L2}$ 	$C_g = C_1 + C_2$ $X_{cg} = X_{C1} + X_{C2}$ 
Energieumsetzung $W = UI t$	Energiespeicherung $W = \frac{1}{2} LI^2$	Energiespeicherung $W = \frac{1}{2} CU^2$