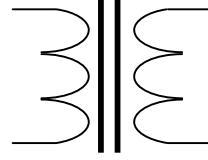


Transformer Turns Ratio:

For Voltage: $E_s = E_p \times \frac{N_s}{N_p}$

For Impedance: $\frac{N_p}{N_s} = \sqrt{\frac{Z_p}{Z_s}}$

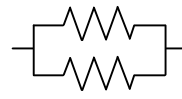


Adding Components:

Resistors in Series: $R_t = R_1 + R_2 + R_3$



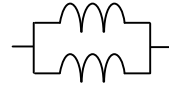
Resistors in Parallel: $R_t = \frac{1}{\frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}}$



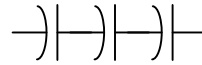
Inductors in Series: $L_t = L_1 + L_2 + L_3$



Inductors in Parallel: $L_t = \frac{1}{\frac{1}{L_1} + \frac{1}{L_2} + \frac{1}{L_3}}$



Capacitors in Series: $C_t = \frac{1}{\frac{1}{C_1} + \frac{1}{C_2} + \frac{1}{C_3}}$



Capacitors in Parallel: $C_t = C_1 + C_2 + C_3$

