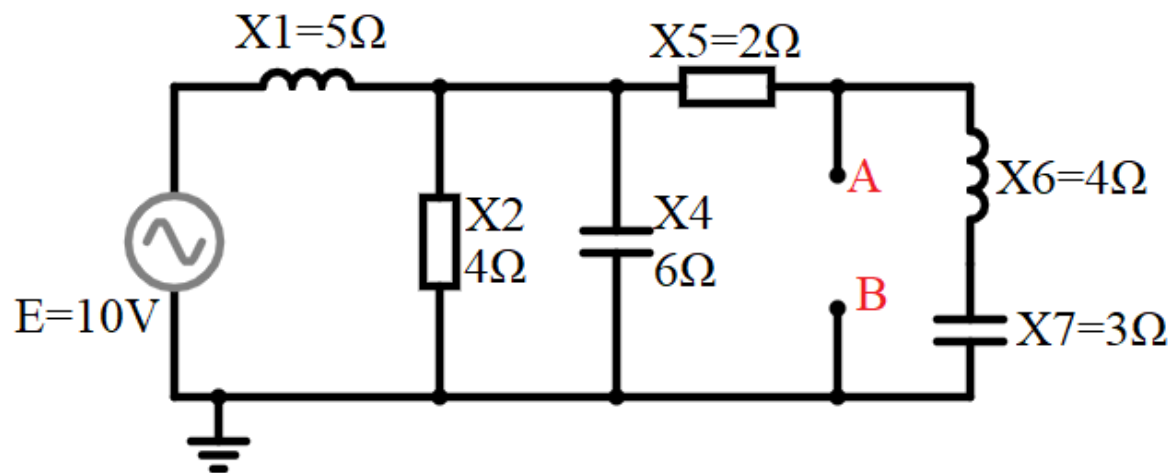


Uppgift 1

Draw Thevenin equivalent circuit for points A and B



Uppgift 2

Find reactive power, real power and apparent power for elements X_1 , X_2 and X_3 if $E = 220V$ and $50Hz$, power of X_1 is $15kW$ with efficiency of 90% , power of X_2 is $10kW$ with power factor $\cos\theta = 0.7$ (inductive), and apparent power for X_3 is $20kVA$ with power factor $\cos\theta = 0.8$ (inductive). Find system's total reactive power, real power and apparent power. Determine a way to raise power factor to 0.95 and to 1 .

