

## Esercizio 1

$E_1=3$  V,  $E_2=4$  V

$A=8$  A

$R_1=3$  ohm,  $R_2=3$  ohm,  $R_3=8$  ohm

$R_4=4$  ohm,  $R_5=2$  ohm

$Req_{E1}=11.6$  ohm,  $Req_{E2}=6.44444$  ohm,  $Req_A=2.62069$  ohm

$I1_{E1}=0.258621$  A,  $I1_{E2}=-0.275862$  A,  $I1_A=2.75862$  A

$I2_{E1}=-0.206897$  A,  $I2_{E2}=0.62069$  A,  $I2_A=-2.2069$  A

$VA_{E1}=-1.03448$  V,  $VA_{E2}=1.10345$  V,  $VA_A=20.9655$  V

$PE1=8.22414$  W,  $PE2=-7.17241$  W,  $PAE=168.276$  W convenzione dei Generatori

## ESERCIZIO 2

$E=230$  V

$R_1=8$  ohm,  $R_2=7$  ohm,  $R_3=18$  ohm

$R_4=6$  ohm,  $XL_1=23$  ohm,  $XL_2=21$  ohm

$E=230$  V,  $\phi_{E1}=0$

$E=230$  V,  $\phi_{E2}=-2\pi/3$

$E=230$  V,  $\phi_{E3}=2\pi/3$

$V0'0=56.8109$  PHI  $-71.1623$  V

$V0''0=213.413$  PHI  $163.638$  V

$J1=27.2974$  PHI  $14.2536$  A

$J2=28.1856$  PHI  $-132.52$  A

$J3=15.886$  PHI  $117.796$  A

$J4=27.5874$  PHI  $57.157$  A

$J5=13.0669$  PHI  $-160.904$  A

$J6=19.0829$  PHI  $-97.8728$  A

$I1=26.775$  PHI  $-27.0636$  A

$I2=40.1647$  PHI  $-141.417$  A

$I3=37.9894$  PHI  $78.531$  A

$P=20.6311$  kW

$Q=11.9612$  kVAR

$\cos\phi=0.865119$ ,  $V_{TH}=250.499$  PHI  $-27.0417$  V

$Z_{TH}=8.11472$  PHI  $18.1302$  ohm

$I_{NO}=30.8698$  PHI  $-45.1719$  A