

## Esercizio 1

E1=14 V, E2=12 V  
A=gm\*V1, gm=2 mS  
R1=5 kohm, R2=5 kohm, R3=4 kohm  
R4=1 kohm, R5=2 kohm  
  
Gseg=[1.5,0,-0.5;0,0.45,-2.2;-0.5,-0.2,2.9]mS  
A=[0,0,0,0,0,0] mA  
E=[-14,12,0,0,0,0] V  
Inode=[0,-25.6,28.4]mA  
Vnode=[3.23207,-9.48523,9.6962]  
V1=-9.6962,V2=-19.1814,V3=9.48523  
V4=-3.23207,V5=-6.46414,V6=-19.1814  
Convenzione generatori:  
PE1=12.0506 mW,PE2=74.8354 mW,PA=-371.974 mW

## ESERCIZIO 2

E1=127 V  
Z1=1+j5 ohm, Z2=1-j10 ohm, Z3=1 ohm  
Z4=4 ohm, Z5=j10 ohm, Z6=-j5 ohm  
R0=5 ohm, ZL1=j5 ohm, ZL2=j6 ohm, ZM=j3 ohm

E1=127 V, phi\_E1=0  
E2=127 V, phi\_E2=-pi\*2/3  
E3=127 V, phi\_E3=pi\*2/3  
V0'0=87.3444 PHI 126.82 V  
V0''0=24.0327 PHI -122.899 V  
J1=37.7512 PHI -99.9891 A  
J2=17.9357 PHI -9.25824 A  
J3=41.5881 PHI 105.557 A  
J4=35.375 PHI 8.19859 A  
J5=10.3005 PHI 150.676 A  
J6=27.9195 PHI -158.816 A  
P=8.48196 kW  
Q=1.07241 kVAR  
VTH=98.2944 PHI 113.562 V  
ZTH=4.58151 PHI -16.4201 ohm  
I1=16.7855 PHI 84.7782 A  
I2=6.4475 PHI -55.4162 A