

## Esercizio 3

```
clear all
%dati
E1=-j*10
I1=5*exp(j*pi/3)
R1=10;
R2=5;
R3=5;
Xl=10;
Xc1=5;
Xc2=15;

%svolgimento

Z1=R1-j*Xc1
Z2=R3+j*Xl
Z3=R2-j*Xc2
Z4=(j*Xl*Z3)/(j*Xl+Z3)

Vv=E1-E1*Z2/(Z1+Z2)
Zeq=Z1*Z2/(Z1+Z2)
VI1=Vv+(Zeq+Z4)*I1
A=VI1*conj(I1)
```

```
E1 =
    0.0000 -10.0000i
```

```
I1 =
    2.5000 + 4.3301i
```

```
Z1 =
    10.0000 - 5.0000i
```

```
Z2 =
    5.0000 +10.0000i
```

```
Z3 =
    5.0000 -15.0000i
```

```
Z4 =
```

$$10.0000 + 20.0000i$$

$$Vv =$$

$$-5.0000 - 5.0000i$$

$$Zeq =$$

$$7.5000 + 2.5000i$$

$$VI1 =$$

$$-5.8678e+01 + 1.2703e+02i$$

$$A =$$

$$4.0335e+02 + 5.7165e+02i$$

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