

AV-1_Z-5 Rješenje:

- a) $A \cdot \bar{A} = 25$
 $A + \bar{A} = 6$
 $A - \bar{A} = -j8$
 $\frac{A}{\bar{A}} = -0,28 - j0,96$
- b) $A \cdot \bar{A} = 100$
 $A + \bar{A} = 17,32$
 $A - \bar{A} = -j10$
 $\frac{A}{\bar{A}} = 0,5 - j0,87$
- c) $A \cdot \bar{A} = 6,25$
 $A + \bar{A} = -2,5$
 $A - \bar{A} = -j4,33$
 $\frac{A}{\bar{A}} = -0,5 + j0,87$

AV-1_Z-6 Rješenje:

$$\underline{E} = 0V \Rightarrow e(t) = 0V$$

AV-1_Z-7 Rješenje:

- a) $I_R = 19 + j11 \text{ A}$, $i_R(t) = 31 \sin(314t + 30^\circ) \text{ A}$
b) $I_L = 116,8 - j202,3 \text{ A}$, $i_L(t) = 330,4 \sin(314t - 60^\circ) \text{ A}$
c) $I_R = -103,6 + j179,5 \text{ A}$, $i_C(t) = 207,3 \sin(314t + 120^\circ) \text{ A}$

AV-1_Z-8 Rješenje:

- a) $p(t) = 4840 \cdot (1 - \cos(628t + 60^\circ)) \text{ W}$
 $P = 4840 \text{ W}$
 $Q = 0 \text{ var}$
 $w(t) = 4840t + 7,71 \sin(628t + 60^\circ) - 6,67 \text{ Ws}$

b) $p(t) = 51380 \cdot \cos(628t + 150^\circ)$ W
 $P = 0$ W
 $Q = 51380$ var
 $w(t) = 81,82 + 81,82 \sin(628t + 150^\circ)$ Ws

c) $p(t) = 45593 \cdot \cos(628t - 30^\circ)$ W
 $P = 0$ W
 $Q = 45593$ var
 $w(t) = 72,6 + 72,6 \sin(628t - 30^\circ)$ Ws