

$$j := \sqrt{-1}$$

$$I(j) := 10$$

$$Z_R(j) := 1.67$$

$$Z_C(j) := -j \cdot 1.25$$

$$I_R(j) := \frac{I(j) \cdot Z_C(j)}{Z_R(j) + Z_C(j)}$$

$$I_R(j) = 3.591 - 4.797i$$

$$I_{R\text{mod}} := |I_R(j)| \quad I_{R\text{rang}} := \arg(I_R(j)) \cdot \frac{180}{\pi}$$

$$I_{R\text{mod}} = 5.992 \quad I_{R\text{rang}} = -53.185$$

$$I_C(j) := \frac{I(j) \cdot Z_R(j)}{Z_R(j) + Z_C(j)}$$

$$I_C(j) = 6.409 + 4.797i$$

$$I_{C\text{mod}} := |I_C(j)| \quad I_{C\text{rang}} := \arg(I_C(j)) \cdot \frac{180}{\pi}$$

$$I_{C\text{mod}} = 8.006 \quad I_{C\text{rang}} = 36.815$$

$$V_R(j) := I_R(j) \cdot Z_R(j)$$

$$V_R(j) = 5.997 - 8.012i$$

$$V_{R\text{mod}} := |V_R(j)| \quad V_{R\text{rang}} := \arg(V_R(j)) \cdot \frac{180}{\pi}$$

$$V_{R\text{mod}} = 10.007 \quad V_{R\text{rang}} = -53.185$$

$$V_C(j) := I_C(j) \cdot Z_C(j)$$

$$V_C(j) = 5.997 - 8.012i$$

$$V_{C\text{mod}} := |V_C(j)| \quad V_{C\text{ang}} := \arg(V_C(j)) \cdot \frac{180}{\pi}$$

$$V_{C\text{mod}} = 10.007 \quad V_{C\text{ang}} = -53.185$$