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1. $4\sqrt{5}\angle-6^\circ \Omega$
 2. $\omega \approx 59.65 \text{ kr/s}$
 3. a) $30e^{j60^\circ} \text{ V}$ or $30\angle60^\circ \text{ V}$
b) Draw circuit diagram with following values: phasor $\mathbf{V}_s = 30\angle60^\circ \text{ V}$, $1\text{ k}\Omega$, $j1 \text{ k}\Omega$, $-j250 \Omega$, current arrow labeled \mathbf{I}_C .
 4. $12\sqrt{10}\angle78.4^\circ \text{ mA}$
 5. $v_b(t) = 3\cos(100\text{kt} + 7^\circ) \text{ V}$