

### Chapter 10, Solution 88.

The schematic is shown below. We insert IPRINT and PRINT to print  $I_o$  and  $V_o$  in the output file. Since  $w = 4$ ,  $f = w/2\pi = 0.6366$ , we set Total Pts = 1, Start Freq = 0.6366, and End Freq = 0.6366 in the AC Sweep box. After simulation, the output file includes:

VP(\$N_0002)	FREQ	VM(\$N_0002)	
E+01	6.366 E-01	3.496 E+01	1.261
(V_PRINT2)	FREQ	IM(V_PRINT2)	IP
-8.870 E+01	6.366 E-01	8.912 E-01	

Therefore,  $V_o = 34.96\angle 12.6^\circ \text{ V}$ ,  $I_o = 0.8912\angle -88.7^\circ \text{ A}$

$$v_o = 34.96 \cos(4t + 12.6^\circ) \text{ V}, \quad i_o = 0.8912 \cos(4t - 88.7^\circ) \text{ A}$$

