

**Chapter 10, Problem 73.**

If the input impedance is defined as  $\mathbf{Z}_{in} = \mathbf{V}_s / \mathbf{I}_s$ , find the input impedance of the op amp circuit in Fig. 10.116 when  $\mathbf{R}_1 = 10 \text{ k}\Omega$ ,  $\mathbf{R}_2 = 20 \text{ k}\Omega$ ,  $C_1 = 10 \text{ nF}$ ,  $C_2 = 20 \text{ nF}$ , and  $\omega = 5000 \text{ rad/s}$ .

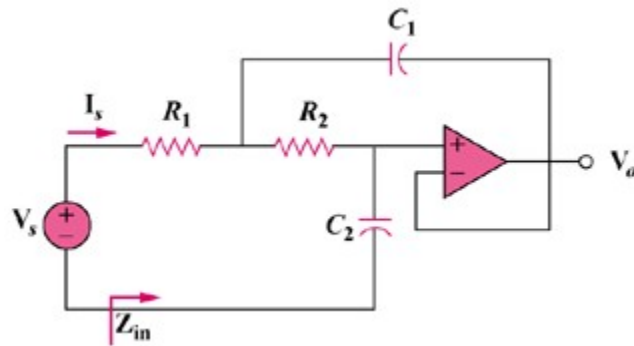


Figure 10.116  
For Prob. 10.73.