

**Chapter 9, Solution 57.**

$$2\text{H} \longrightarrow j\omega L = j2$$

$$1\text{F} \longrightarrow \frac{1}{j\omega C} = -j$$

$$Z = 1 + j2 \parallel (2 - j) = 1 + \frac{j2(2 - j)}{j2 + 2 - j} = 2.6 + j1.2$$

$$Y = \frac{1}{Z} = \underline{0.3171 - j0.1463 \text{ S}}$$