**Chemical Engineering 374**

**Reading Questions 14—Chapter 8.6**

**Name** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. When can minor losses actually be larger than pipe losses in a piping system?
2. With the loss coefficient method of predicting minor losses, a single value of KL is used for a valve or fitting, which suggests that the loss coefficient is independent of Reynolds number. Are the losses predicted for that valve or fitting also independent of Reynolds number? Explain.
3. How can an engineer obtain more accurate values of loss coefficients for a fitting or valve than the approximate values in Table 8-4?
4. What physical phenomenon is responsible for higher losses in a sharp entrance than in a rounded entrance?
5. What is the primary cause of losses in bends or elbows?
6. In Example 8-6, why did the pressure increase as the water flowed through the fitting? How is it possible for a fluid to flow from a lower to a higher pressure?