

**Purdue University**  
**School of Nuclear Engineering**  
**NUCL 355 - Nuclear Thermal-Hydraulics Laboratory**  
**Spring**

Prelab 6: Pressure Losses in Pipes and Similarity Law

1. Water at 60°F flows from the basement to the second floor through the 0.5 in.-diameter copper pipe (drawn tubing) at a volumetric flow rate of  $Q = 10$  gal/min. The water exits through a faucet of diameter 0.375 in. as shown in the figure below.

Determine the pressure at point (1) if:

- a. all losses are neglected
- b. the only losses included are the major losses
- c. all losses are included

