

14.37. Water is flowing in a pipe with a circular cross section but with varying cross-sectional area, and at all points the water completely fills the pipe. (a) At one point in the pipe the radius is 0.150 m. What is the speed of the water at this point if water is flowing into this pipe at a steady rate of $1.20 \text{ m}^3/\text{s}$? (b) At a second point in the pipe the water speed is 3.80 m/s . What is the radius of the pipe at this point?