

CHEN.3030 Fluid Mechanics
Short Quiz: The Continuity Equation

Water flows steadily through a 4 cm diameter pipe that is 10 cm long. The pipe wall is porous, leading to a small flow through the wall. The pipe inlet velocity is 10 m/s and the average exit velocity is 9 m/s.

Find the average velocity of the water that is passing through the porous surface.

