

Washing Your Neighbor's Patio

Students would like to send a water stream 24 m across their neighbor's yard to hit a target lying on the ground on his patio. They have a hose of inside diameter 1.5 cm, but when they turn on the water they find they can spray a distance of only 1.5 m. So they attach a nozzle to the hose and now find they can just hit their target.

During the students' experimentation, they held the end of the hose at the same height as the target.

(5 points) What is the inner diameter of the nozzle?