

- 3** Water is ejected from the nozzle of a hose at a speed of  $2.0 \text{ m s}^{-1}$ . The density of water is  $1000 \text{ kg m}^{-3}$  and the diameter of the nozzle is  $0.50 \text{ cm}$ .

What is the force exerted on the nozzle by the ejected water?

**A**  $0.039 \text{ N}$

**B**  $0.079 \text{ N}$

**C**  $0.31 \text{ N}$

**D**  $7.9 \text{ N}$