

- 14** Water is pumped through a nozzle at the end of a hose. The nozzle has a circular cross-section of diameter 50 mm. A mass of 100 kg of water takes a time of 2.0 s to move through the nozzle. The density of water is 1000 kg m^{-3} .

What is the speed of the water in the nozzle?

- A** 6.4 m s^{-1} **B** 13 m s^{-1} **C** 25 m s^{-1} **D** 51 m s^{-1}