

Solutions

Each answer shows the steps, then the **result**.

2.1

- $v_2 = \frac{A_1 v_1}{A_2} = \frac{0.020 \times 1.0}{0.0050} = 4.0 \text{ m s}^{-1}$

2.2

- it drops (Bernoulli's principle)

2.3

- $A_1 v_1 = A_2 v_2$

3.1 B

3.2 B

3.3

(a)

- $v_2 = \frac{0.010 \times 2.0}{0.0040} = 5.0 \text{ m s}^{-1}$

(b)

- the pressure drops, since the fluid moves faster there (Bernoulli)