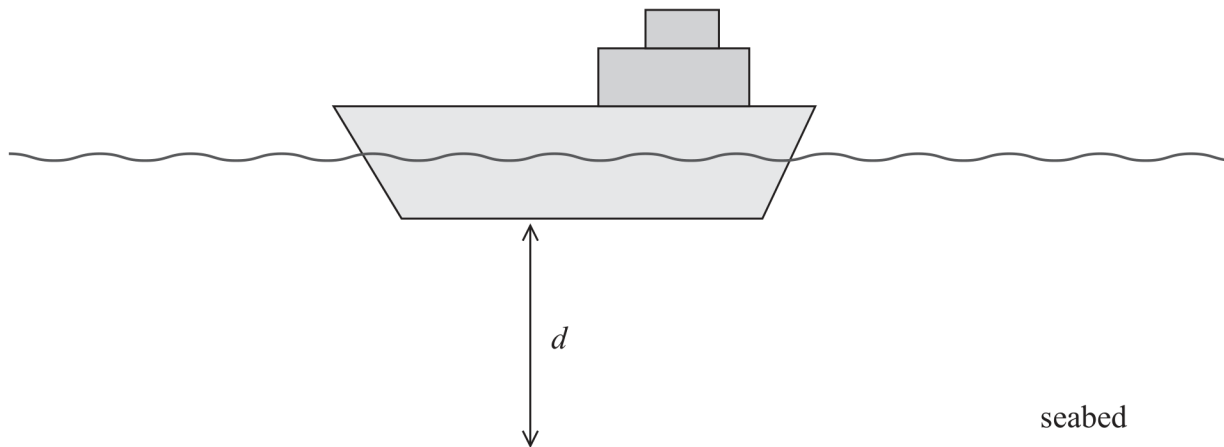**9** A pulse of ultrasound is emitted from the bottom of a boat. The ultrasound reflects from the seabed and is detected at the bottom of the boat after time t. The depth d of water under the boat is shown.

The ultrasound has a frequency f and travels at a speed v in the seawater.

Which of the following can be used to calculate d?

☒ **A** $d = vt$

☒ **B** $d = \dfrac{v}{f}$

☒ **C** $d = \dfrac{vt}{2}$

☒ **D** $d = \dfrac{v}{2f}$

(Total for Question 9 = 1 mark)