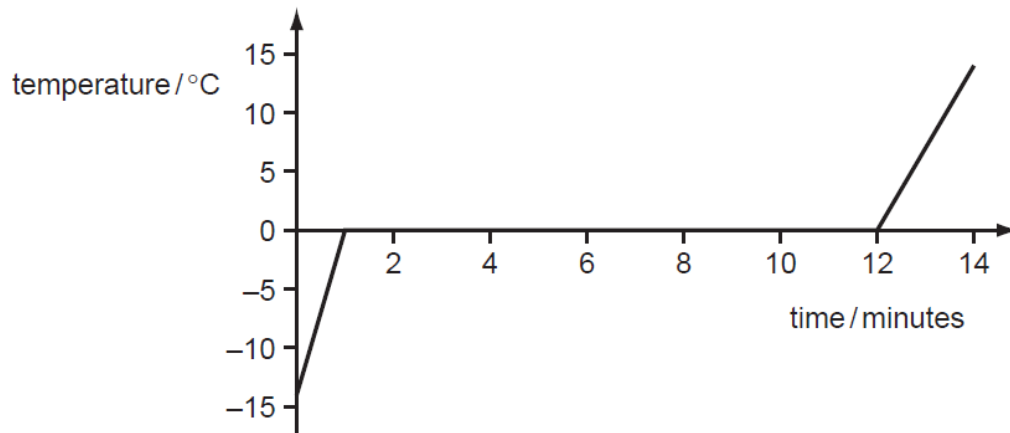


- 12** A block of ice is heated at a constant rate by a 0.25 kW heater.

The graph below shows how the temperature of the ice (and subsequently water) changes with time.



Assume that all the energy supplied is used to heat the ice.

What is the original mass of the block of ice? The specific latent heat of fusion of water is $3.3 \times 10^5 \text{ J kg}^{-1}$.

- A** 0.5 g **B** 8.3 g **C** 0.5 kg **D** 8.3 kg