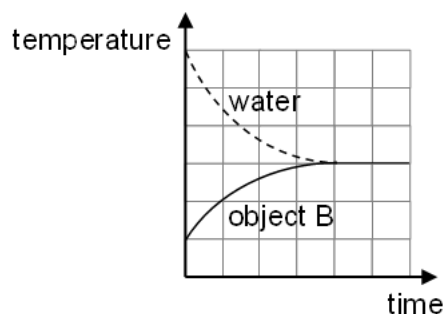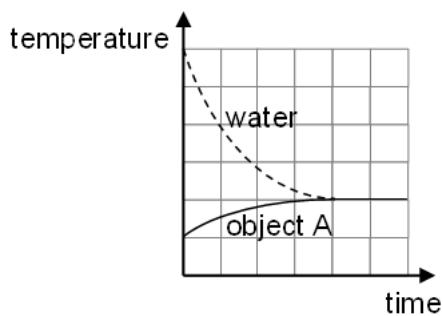**13** Object A is dropped into a thermally insulated container of water and allowed to come to thermal equilibrium with the water. The experiment is repeated with a different object B. The mass and initial temperature of water are the same in the two experiments. The mass and initial temperature of objects A and B are also the same. The following graphs show the variation with time of the temperature of the objects and the water.

If c_A and c_B are the specific heat   capacities of object A   and object B respectively, what is the ratio of $\dfrac{c_A}{c_B}$?

A 0.38   B   1.5   C   2.0
   D   2.7