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A toy remote control speed boat is launched from one edge of a small pond and moves in a straight line across the pond's surface.

The boat's velocity, $v \text{ m s}^{-1}$, is modelled in terms of time, t seconds after the boat is launched, by the expression

$$v = 0.9 + 0.16t - 0.06t^2$$

16 (a)

Find the acceleration of the boat when $t = 2$

[3 marks]**16 (b)**

Find the displacement of the boat, from the point where it was launched, when $t = 2$

[4 marks]