

IB Calculus Problem 018

A particle moves along a straight line with velocity $v = 12t - 2t^3 - 1$, for $t \geq 0$, where v is in centimetres per second and t is in seconds.

- A. Find the acceleration of the particle at time $t = 2.7$ seconds.
- B. Find the displacement of the particle after 1.3 seconds.