

- 9 A particle is moving in a straight line. The acceleration $a \text{ m s}^{-2}$ of the particle at time $t \text{ s}$ is given by $a = 0.8t + 0.5$. The initial velocity of the particle is 3 m s^{-1} in the positive x -direction.

Determine whether the particle is ever stationary.

[6]