A Level Mathematics

Chapter 9 - Mechanics

Constant Acceleration

Chapter Overview

1. Displacement-Time Graphs

2. Velocity-Time Graphs

3. Constant Acceleration Formulae (SUVAT)

4. Vertical Motion Under Gravity



1. **Displacement-Time Graphs**

Describe the motion of each object:



**Velocity** is the rate of change of displacement

(i.e. gradient of displacement-time graph)

Average Velocity = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Average Speed = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Example** *(Exercise 9A Question 2)*



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