

# Time Dilation

## Module: The Nature of Light

### Table of contents

Overview . . . . .	1
Core Ideas . . . . .	1
Key Formulas . . . . .	1
Exam Focus . . . . .	1
Related Concepts . . . . .	2

### Overview

$$t = t_0 / \sqrt{1 - v^2/c^2}$$

### Core Ideas

- Define the concept in your own words.
- Identify the key variables and relationships.
- Connect the concept to the module inquiry question.

### Key Formulas

- Time Dilation:

$$t = \frac{t_0}{\sqrt{1 - \frac{v^2}{c^2}}}$$

### Exam Focus

- Expect both multiple choice and short answer questions.
- Show working and use correct units.

## **Related Concepts**

- Review the linked module section for context and extensions.