

CHAPTER OVERVIEW

4: One Dimensional Kinematics

"In the first place, what do we mean by time and space? It turns out that these deep philosophical questions have to be analyzed very carefully in physics, and this is not easy to do. The theory of relativity shows that our ideas of space and time are not as simple as one might imagine at first sight. However, for our present purposes, for the accuracy that we need at first, we need not be very careful about defining things precisely. Perhaps you say, "That's a terrible thing—I learned that in science we have to define everything precisely." We cannot define anything precisely! If we attempt to, we get into that paralysis of thought that comes to philosophers, who sit opposite each other, one saying to the other, "You don't know what you are talking about!" The second one says. "What do you mean by know? What do you mean by talking? What do you mean by you?", and so on. In order to be able to talk constructively, we just have to agree that we are talking roughly about the same thing. You know as much about time as you need for the present, but remember that there are some subtleties that have to be discussed; we shall discuss this later ^[1]" - Richard Feynman

[4.1: Introduction to One Dimensional Kinematics](#)

[4.2: Position, Time Interval, and Displacement](#)

[4.3: Velocity](#)

[4.4: Acceleration](#)

[4.5: Constant Acceleration](#)

[4.6: One Dimensional Kinematics and Integration](#)

References

1. Richard P. Feynman, Robert B. Leighton, Matthew Sands, *The Feynman Lectures on Physics*, Addison-Wesley, Reading, Massachusetts, (1963), p. 12-2.

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