January 20, Week 1

Today: Chapter 1, Introduction to S.I. Units and Kinematics

Homework Assignment #1: 4 Introductory Mastering Physics Problems due January 23, 11:59PM.

Homework Assignment #2 due January 30
Mastering Physics: 1.6, 2.4, 2.59, and 3 special Mastering Physics problems.
Written Problem: 2.75.

Syllabus Addendum: Exam 1 will be on February 10. Exam 2 will be on February 24. Corrected syllabi can be downloaded on the class webpage.

Announcement

THE OFFICE OF ACCESSIBILITY RESOURCE CENTER IS LOOKING FOR A STUDENT IN THIS CLASS TO VOLUNTEER TO PROVIDE NOTES FOR THIS CLASS. THE STUDENT WILL BE PAID A STIPEND FOR THE SEMESTER. INTERESTED STUDENT SHOULD COME BY OUR OFFICE AT 2021 MESA VISTA HALL TO COMPLETE THE REQUIRED HIRING PAPERWORK.

Daniel Weems,
Note-taking Coordinator

Accessibility Resource Center
office 505.277.3506
fax 505.277.3750
http://arc.unm.edu

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- Physics is the fundamental science. All other sciences are built on it.

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- If experiment and prediction do agree, repeat and build consensus.

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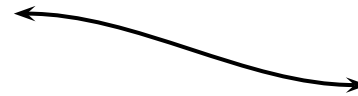To express very large of very small numbers, we use scientific notation.

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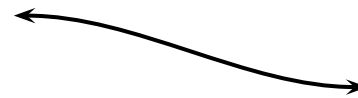
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Number between
1 and 10

Number of places
you shift decimal

Engineering Notation

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Any size number

Multiple of 3

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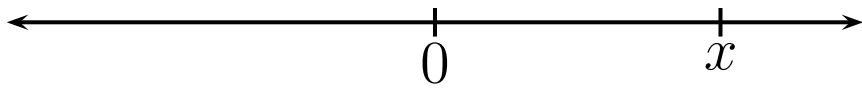
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  - Whether the object is speeding up or slowing down at every time = Acceleration

Position

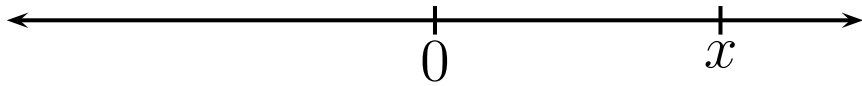Position = How far and what direction from an origin.

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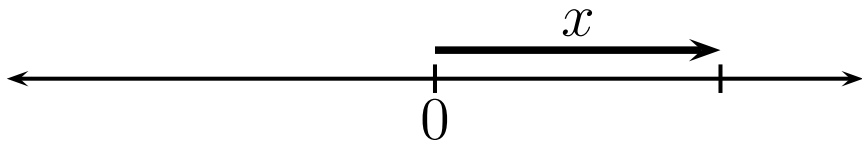Position = How far and what direction from an origin.

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What we mean is:

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- <u>Example:</u> A bird, flying $6\,m$ above the ground, is watched by a boy on the ground and by a worm which is $50\,cm$ below the ground. Sketch a picture of this situation and find the position of all three.

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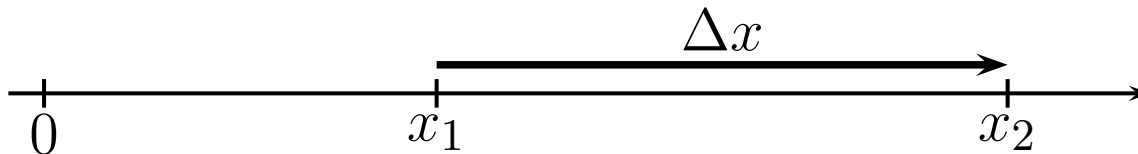- Displacement = change in position = $\triangle x$ (Delta x)

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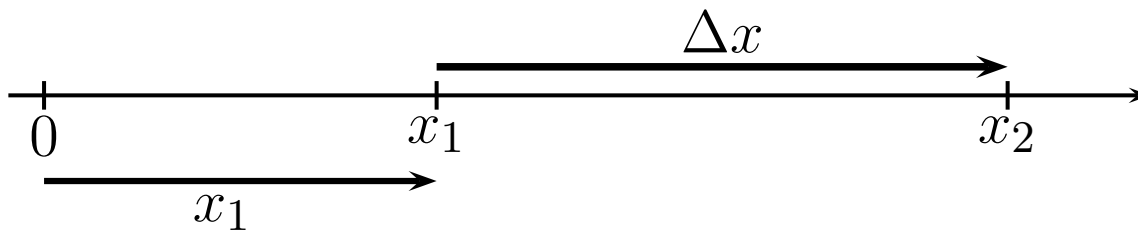Moving objects change their position, so we introduce displacement.

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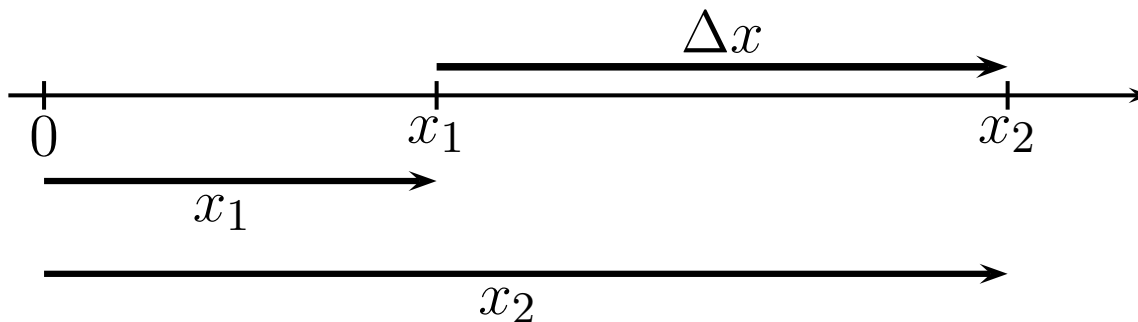# Displacement

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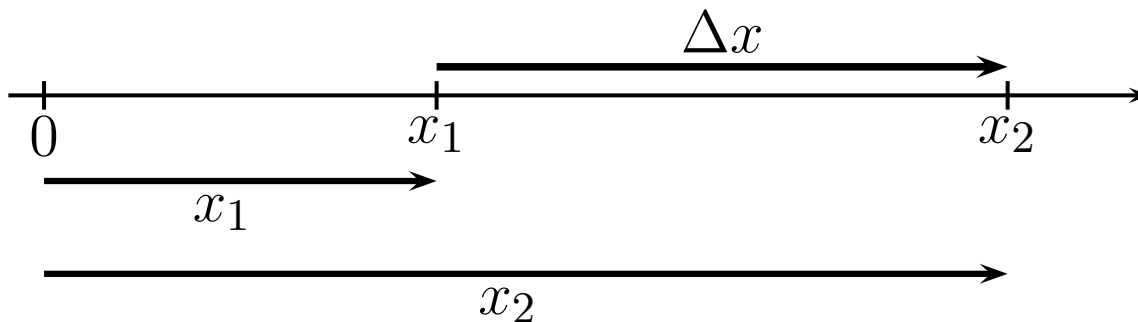
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- $\boxed{\Delta x = x_2 - x_1}$

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To add or subtract, quantities must have the same unit!

Things to Do:

Register Your I-Clicker! - Quizzes will begin Monday, January 23.

Get your Mastering Physics access code and register. First homework is due Monday, January 23.