

PHYSICS 151 READING ASSIGNMENT

FOR JUNE 5

SECTIONS 2.4 AND 2.5

2.4 Acceleration

- Acceleration - rate at which velocity changes.
- $a_x = \frac{\Delta v_x}{\Delta t}$ - Actually only true for constant acceleration motion. Luckily, that's the only type we'll do.
- Unit of acceleration: $\frac{m/s}{s} = m/s^2$.
- Acceleration is the slope of the velocity-versus-time graph.
- The sign (and therefore direction) of acceleration is tricky. Read this carefully.

2.5 Constant Acceleration

- You will be expected to know and be able to use the three equations of motion on page 45 for the *rest* of your physics studies. For now, learn them and try to understand what they mean. We'll practice using them in problem solving in the next section.
- For constant acceleration, the velocity-versus-time graph is a straight line and the position-versus-time graph is a parabola.