Honors Physics Homework 8/15
Hewitt \# 11, 14, 22, 23, 43, 45
11. What is the acceleration of a car that travels in a straight line at a constant speed of 100 $\mathrm{km} / \mathrm{hr}$ ?
14. Why does the unit of time enter twice in the unit of acceleration?
22. What does the slope of the curve on a distance-versus-time graph represent?
23. What does the slope of the curve on a velocity-versus-time graph represent?
43. A dragster going at $15 \mathrm{~m} / \mathrm{s}$ north increases its velocity to $25 \mathrm{~m} / \mathrm{s}$ north in 4 seconds. What is its acceleration during this time interval?
45. We drive for 1 hour at $20 \mathrm{~km} / \mathrm{hr}$. Then we drive for 1 hour at $30 \mathrm{~km} / \mathrm{hr}$. What is our average speed?

