

Velocity Time Graphs

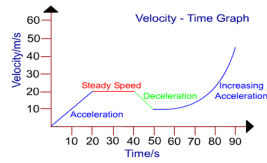
Velocity - Time Graphs

Objectives

Analyze slopes of Velocity-Time graphs.

Differentiate between D-T graphs and V-T graphs

Sketch the general shape of each type of graph.

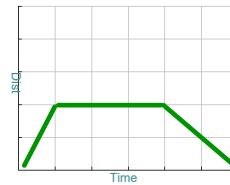


Distance vs. Displacement Speed vs. Velocity

REVIEW

Distance-Time

Displacement = 0
Distance = 4m



$$S = \frac{d}{t} = \frac{4}{6} = .67 \text{ m/s}$$

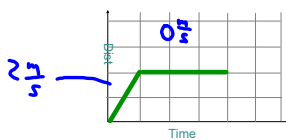
$$V = \frac{\Delta d}{\Delta t} = \frac{0}{6} = 0 \text{ m/s}$$

Average Velocity

$$\bar{v} = \frac{\text{total } \Delta d}{\text{total time}}$$

Instantaneous Velocity

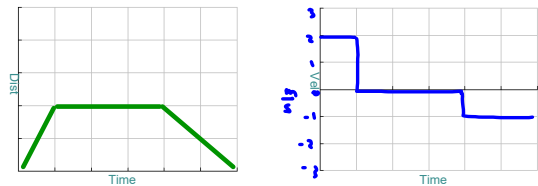
velocity for a small period of time
Ex. data point on the slope
2m/s or 0m/s



$$V = \frac{2-0}{4} = .5 \text{ m/s}$$

Compared

Distance-Time — to — Velocity-Time



Slopes on each graph represent the same velocity. Just different "y" axis.

Assignments . . .



- Chapter 1 Homework #14 - 15

