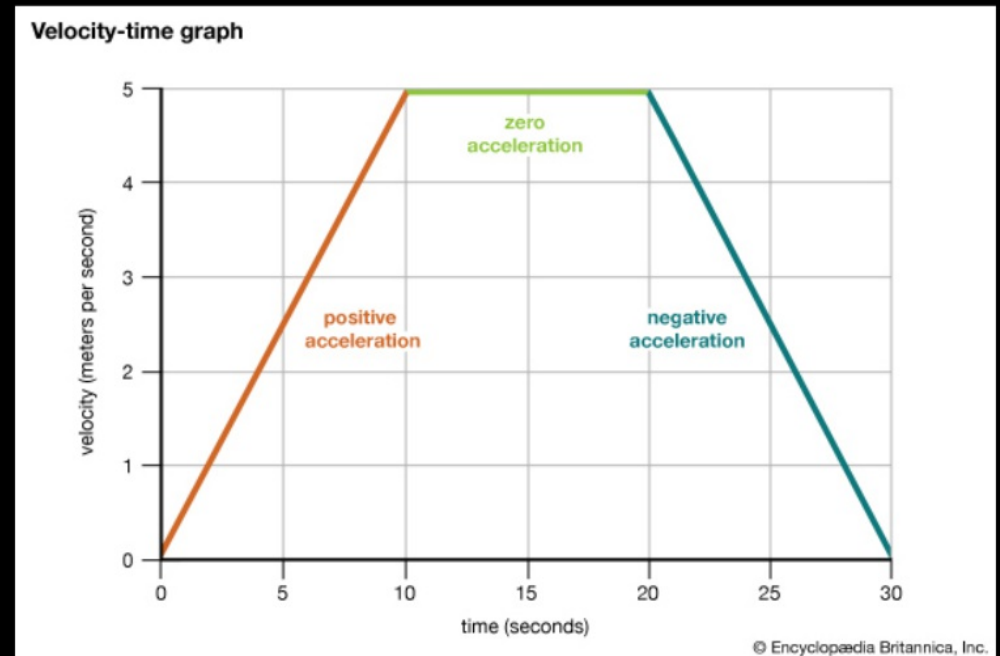


4.14.20

Graphing: Velocity Time Graphs

Today's Objectives:

- Distinguish between PT and VT Graphs
- Learn VT graphs for all 7 types of motion



(P.T)

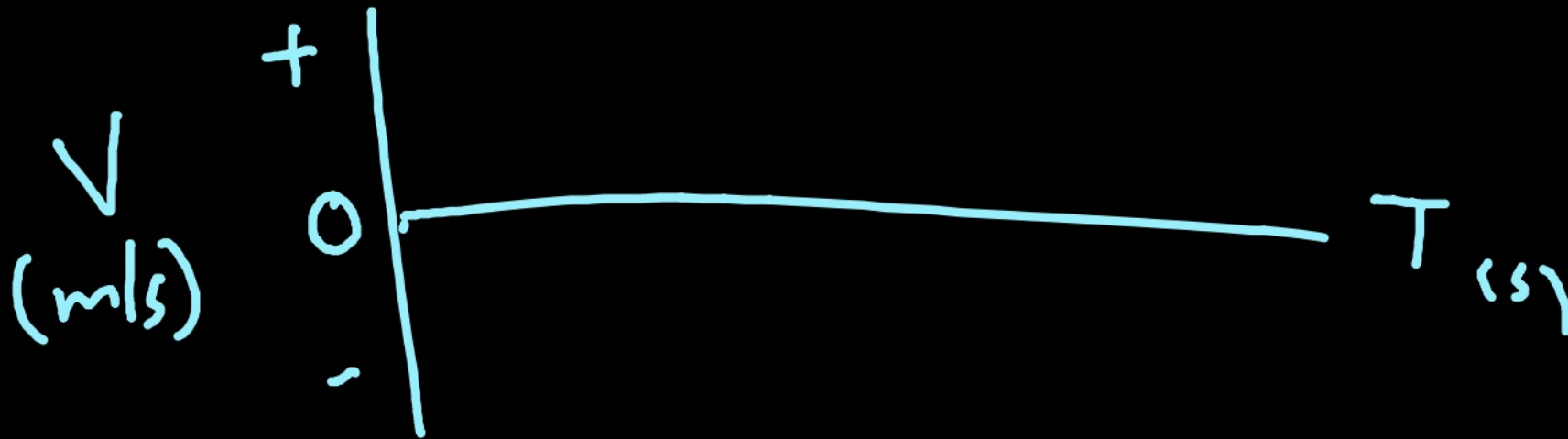
A position-time graph tells you

Where you
Are

(V.T.)

A velocity-time graph tells you

How fast
you're going

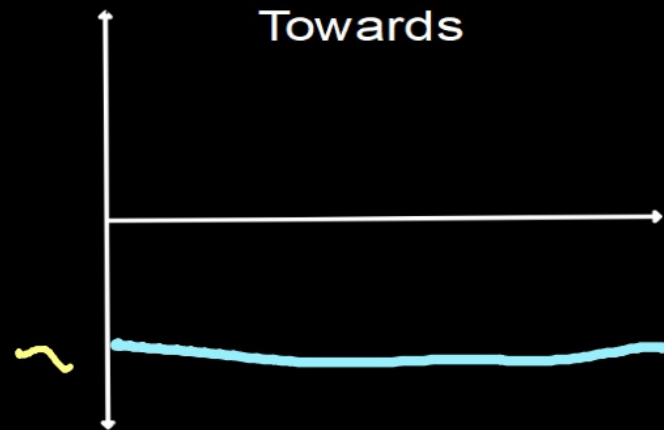
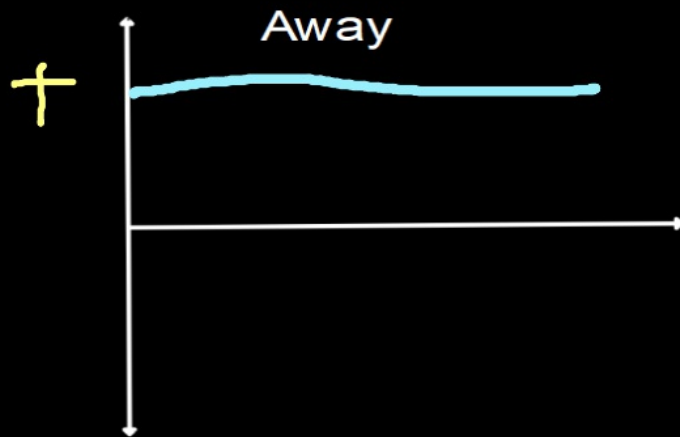


When an object stays still for 10s, its velocity is Zero m/s

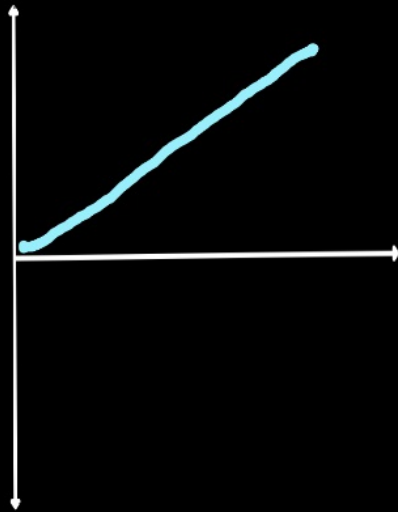


It has to be on Zero!

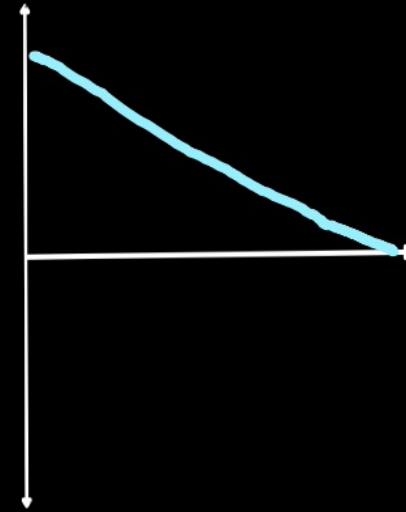
Constant Velocity



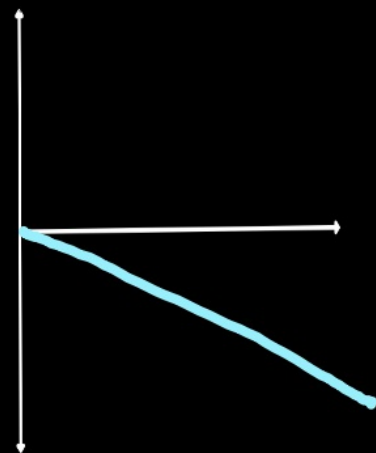
Speeding up away



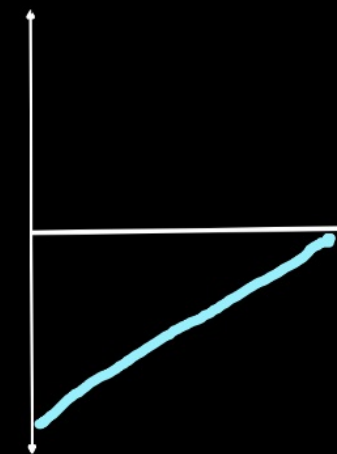
Slowing Down Away



Speeding up towards



Slowing down towards



Velocity vs. Time Graphs
(7 motions summary)

I) Type of Motion

1) Still

2) CV Away

3) CV Towards

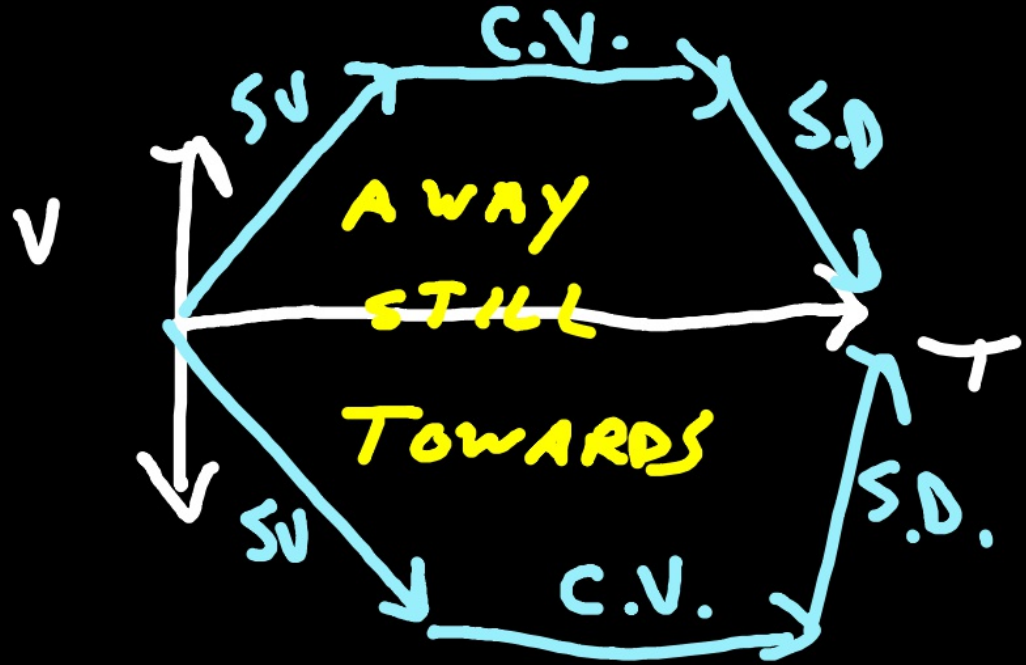
4) Speed Up Away

5) Slow Down Away

6) Speed Up Towards

7) Slow Down Towards

II) v-t sketch

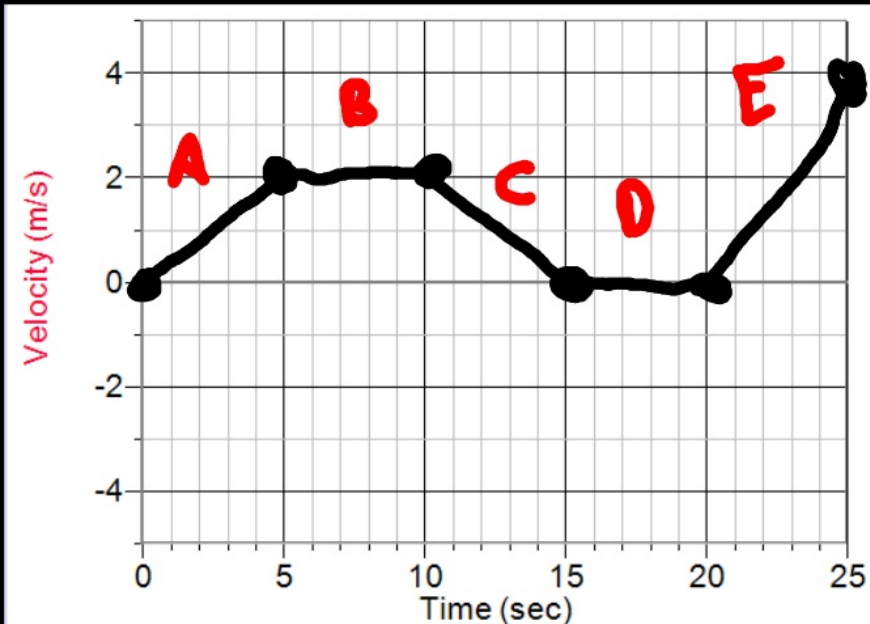


Acceleration - Change in velocity over time

- 1) Speed Up 2) Slow Down 3) Change Direction.

Slope of a v/t = Acceleration

Units = m/s^2 or $m/s/s$



A: $2/5$ m/s^2
B: $0/5$
C: $-2/5$
D: $0/5$
E: $4/5$

