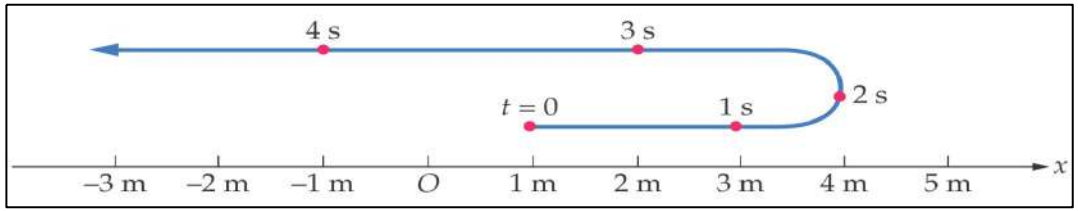
1D Motion Graphing

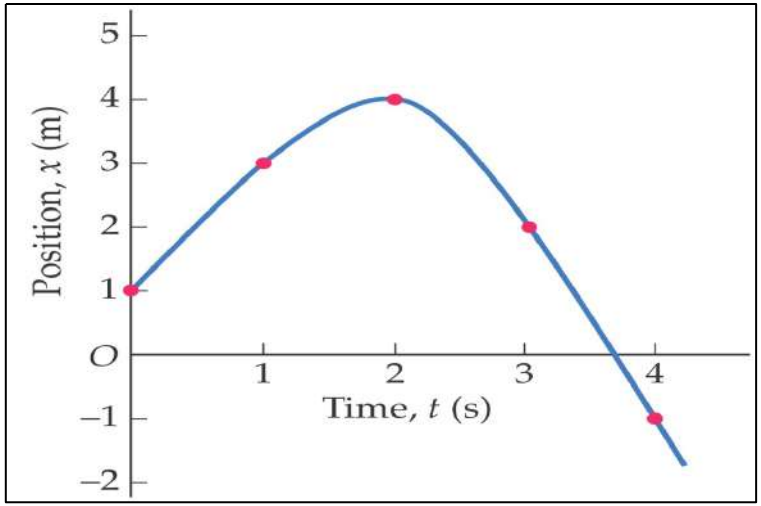
Vocab Check

Scalars: Distance and Speed

Vectors: Displacement, Velocity, Acceleration

Graphing





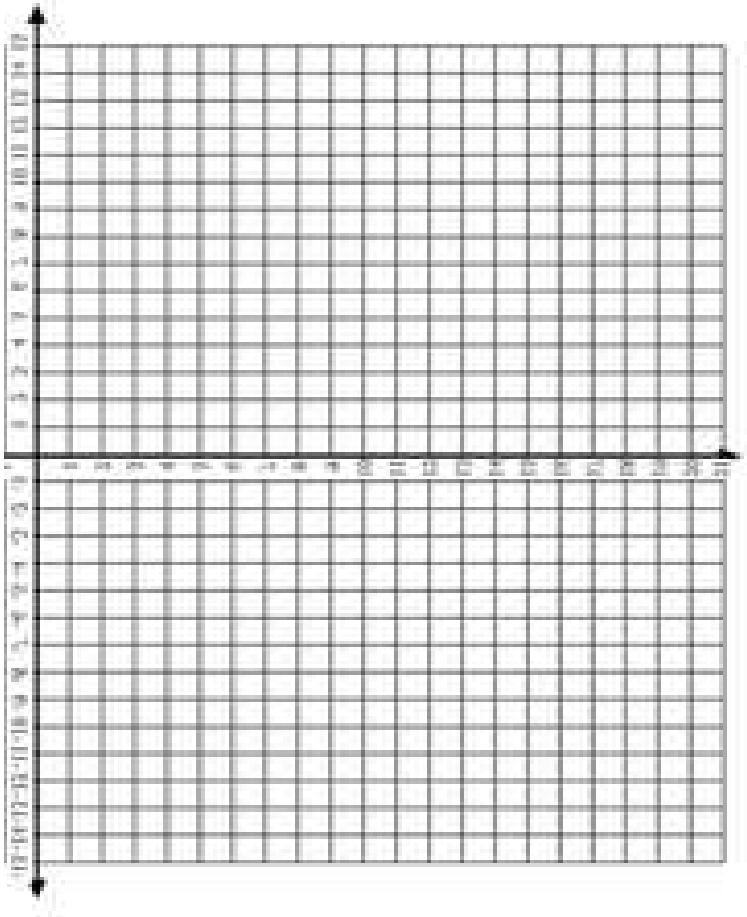
Time	Position

Graphing

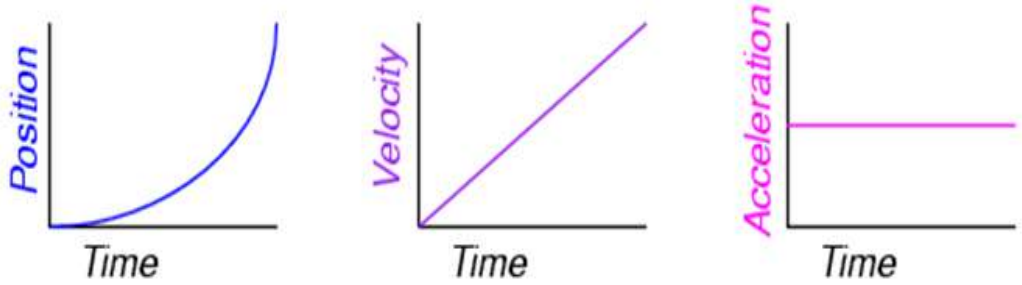
A dog starts at a position of 0 meters and walks +10 m in 30 seconds to a fire hydrant to go do his business. He then walks -20 meters in 60 seconds to the backyard tree. What does his position vs. time graph look like?

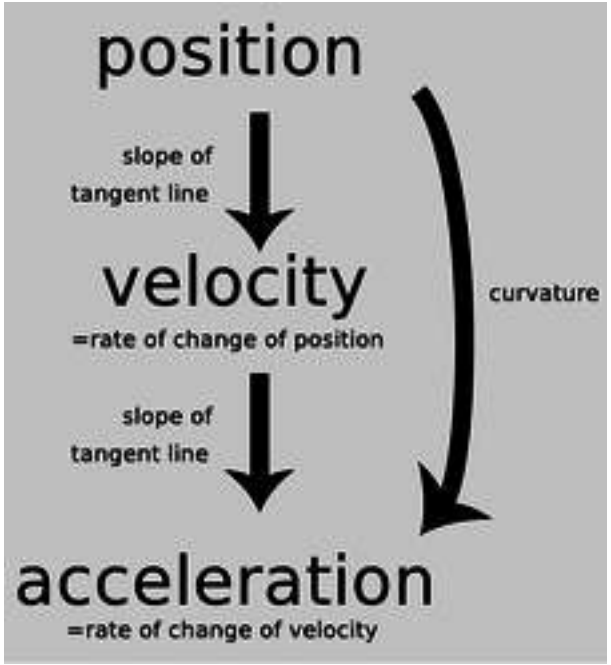
What is velocity from 0-30 seconds?

What is the velocity from 30-60 seconds?



The relationship between graphs

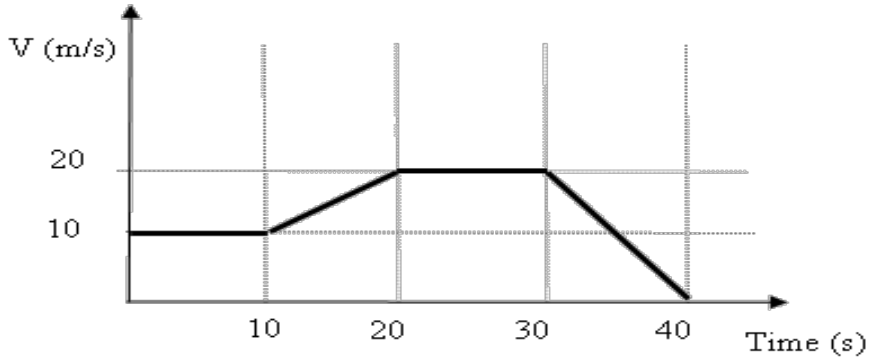




Graphing – v vs. t

Velocity vs. Time Graph:
Slope is acceleration

What is happening at each point?



Follow up Question:

- For the position vs. Time graph below what represents velocity?
- When is the object at rest?
- What is the velocity from 0-10 seconds?
- When is the velocity from 15-40 seconds?