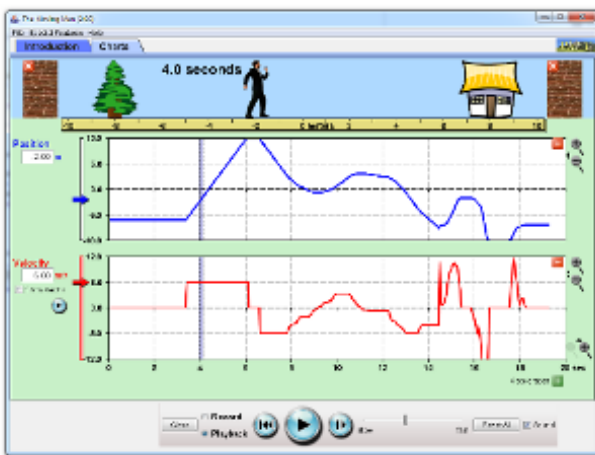


The Graphical Analysis of Position & Time

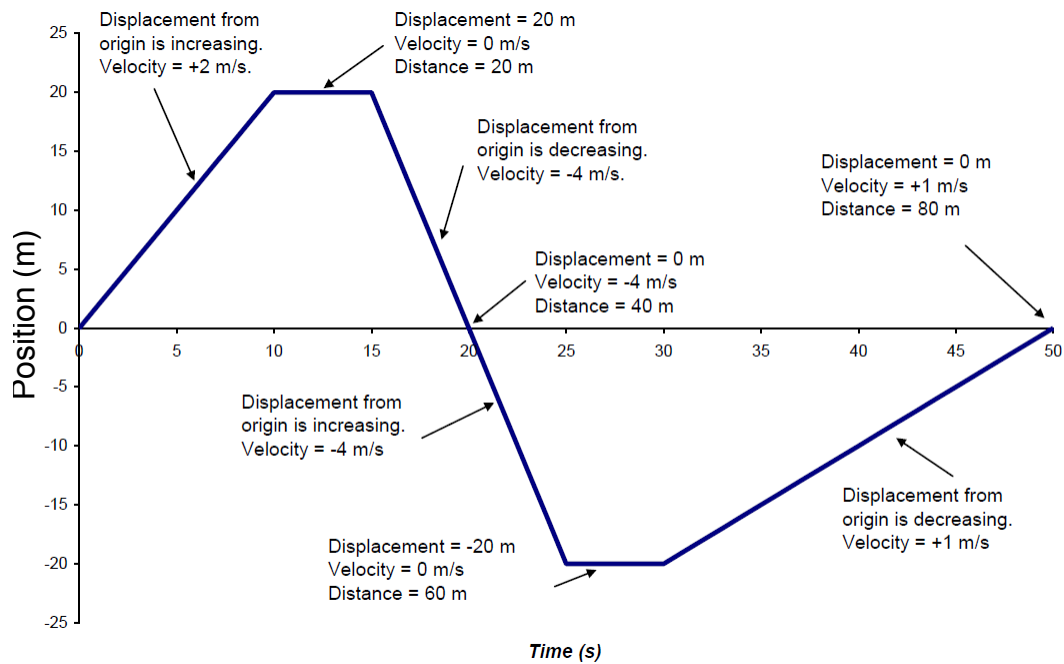
The Moving Man



*Use equation feature

Objectives

- Review Frame of reference and coordinate system.
- Analyze how position can change with time.
- Learn how to find key points on the graph.
- Develop knowledge about how the graph relates to speed and velocity.



- Slope at any point is the instantaneous velocity.
- Sign of the slope indicates the direction the object is travelling.
- Distance is the sum of the displacements in both directions.
- Average *velocity* is the object's *displacement* divided by the time.
- Average *speed* is the object's *distance* divided by the time.

Guided Practice

1. Calculate the average velocity between 10 and 20 s.
2. Calculate the average velocity between 5 and 35 s.
3. Calculate the average velocity between 15 and 25 s.
4. Calculate the average speed between 15 and 25 s.
5. Calculate the average speed between 20 and 50 s.