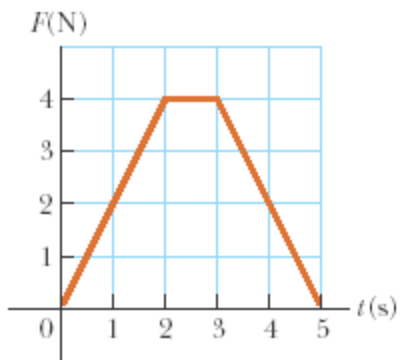


Multiple Representations

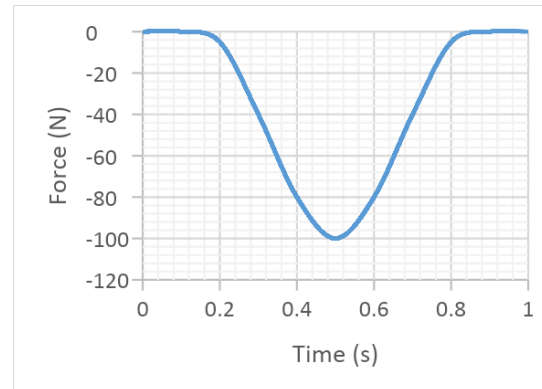
For each representation below, you will create the following:

- A story for the problem
- Force vs Time graph
- Free Body Diagram
- Mathematical Representation (equation) of your choosing
- Velocity and Acceleration vs time graphs

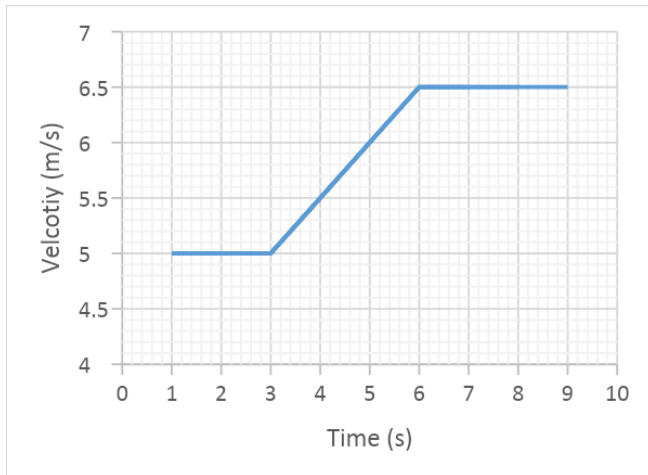
1. Object mass 2kg. Initial velocity is 0 m/s



2. Object mass 100kg. Initial velocity is +15m/s



3. Object mass 4kg



5. Object mass 1000kg

$$(0 \text{ m/s})^2 = (15 \text{ m/s})^2 + 2(-4.9 \text{ m/s}^2)(22.96 \text{ m})$$

4. Object mass 75 kg. Initial velocity +3 m/s Upward force is 1500 N.

