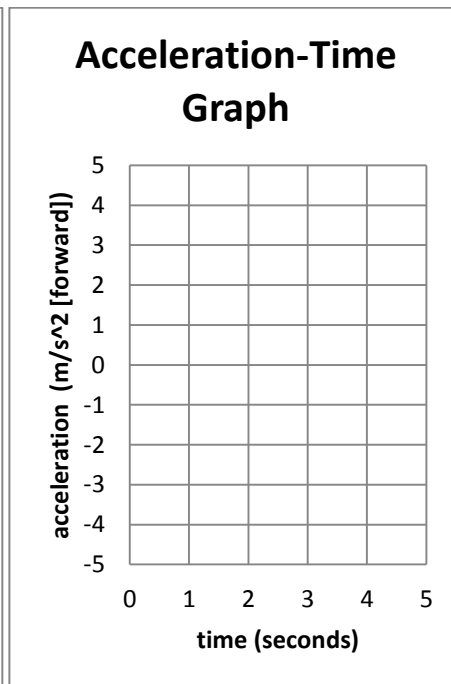
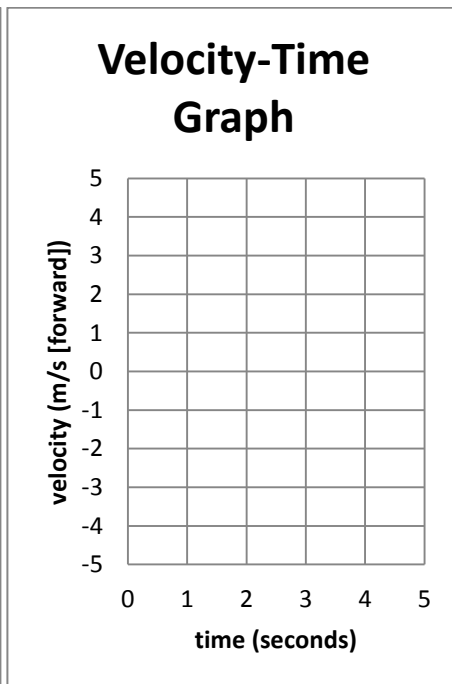
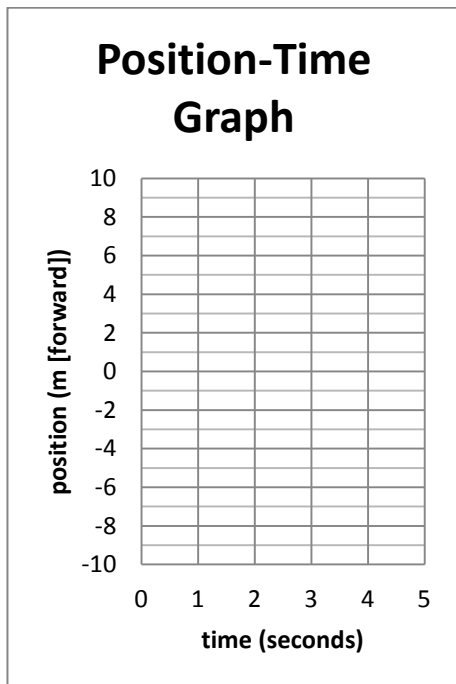


Motion Graphs for Different Types of Motion

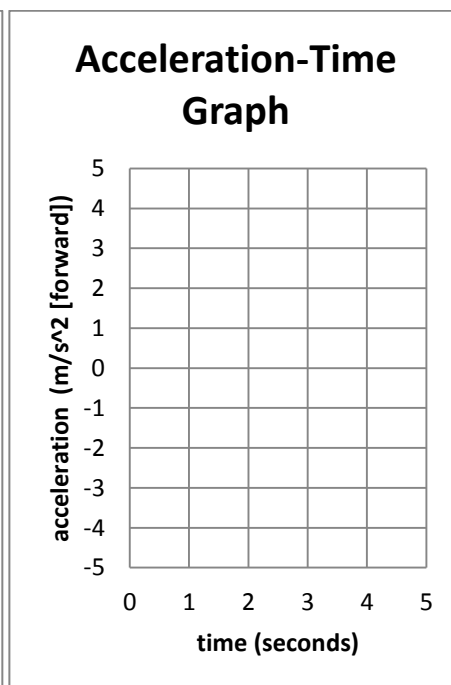
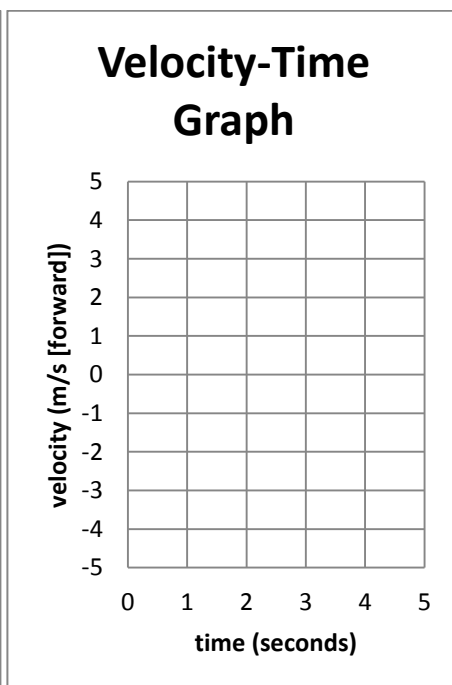
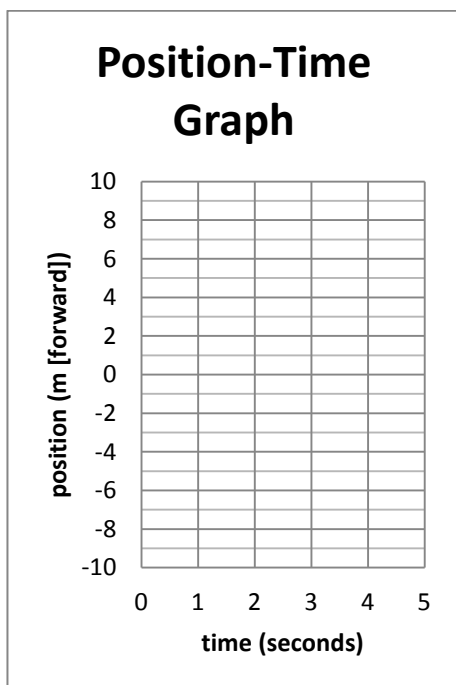
Moving Forward at Constant Velocity (Slow)

A person is standing 3 m behind the origin and walks forward at a constant velocity of 1 m/s.



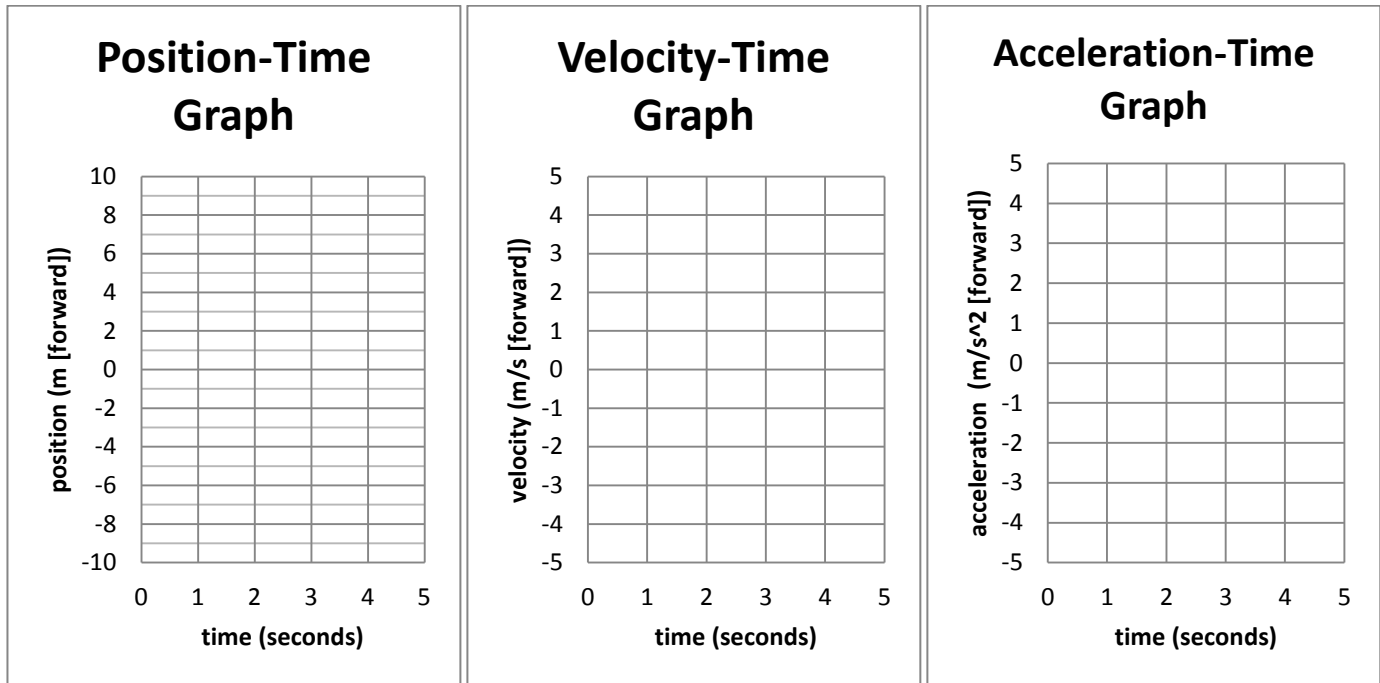
Moving Forward at Constant Velocity (Fast)

A person is standing 9 m behind the origin and runs forward at a constant velocity of 3 m/s.



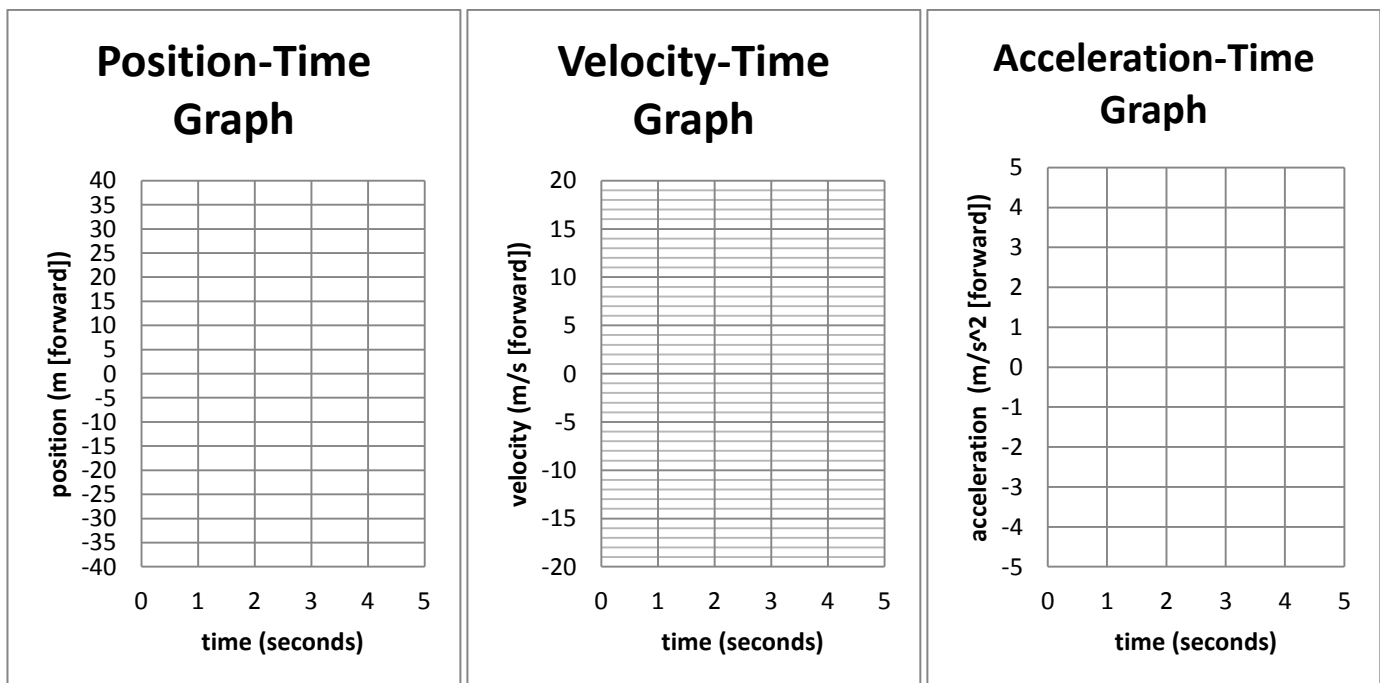
Moving Backwards at Constant Velocity

A person is standing 6 m in front of the origin and begins jogging towards the origin at a constant velocity of 2 m/s.



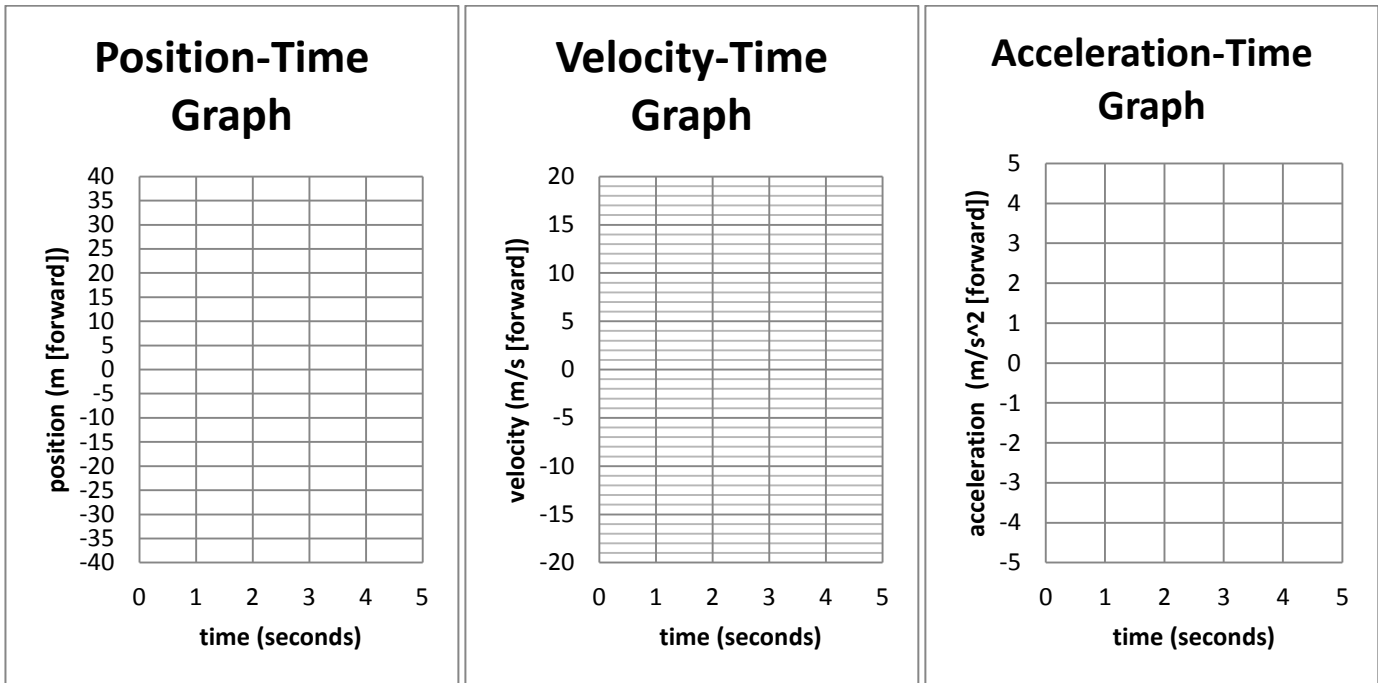
Accelerating Forward from Rest (Slow)

A person starts 10 m in front of the origin and accelerates forwards (from rest) at 2 m/s².



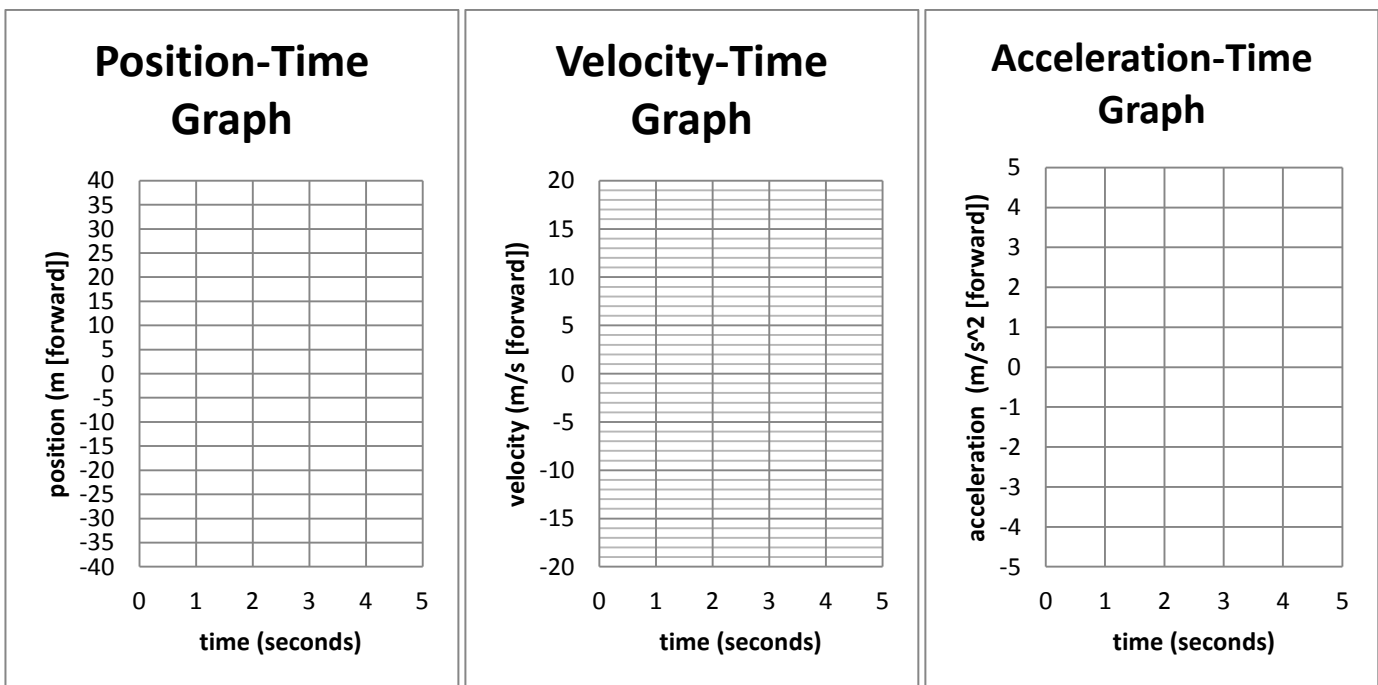
Accelerating Forward from Rest (Fast)

A person starts 18 m behind the origin and accelerates forward (from rest) at 4 m/s^2 .



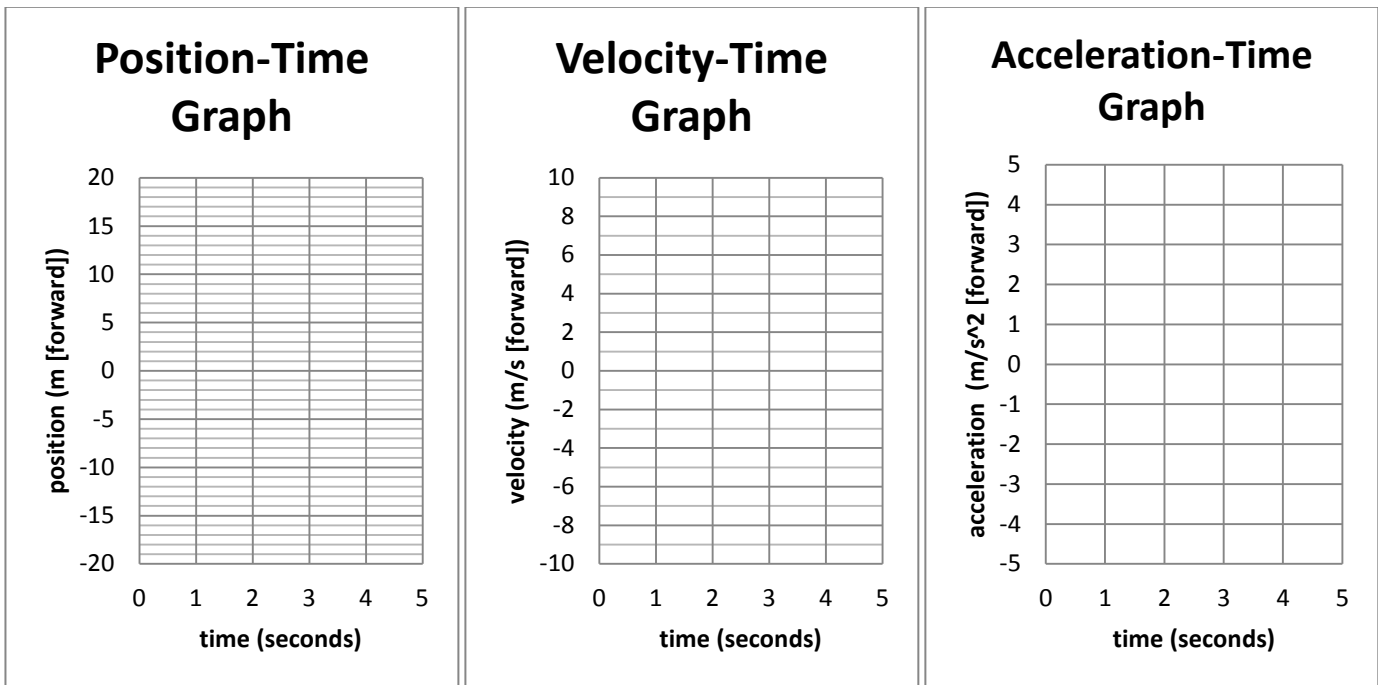
Accelerating Backwards from Rest

A person starts at the origin and accelerates backwards at 2 m/s^2 .



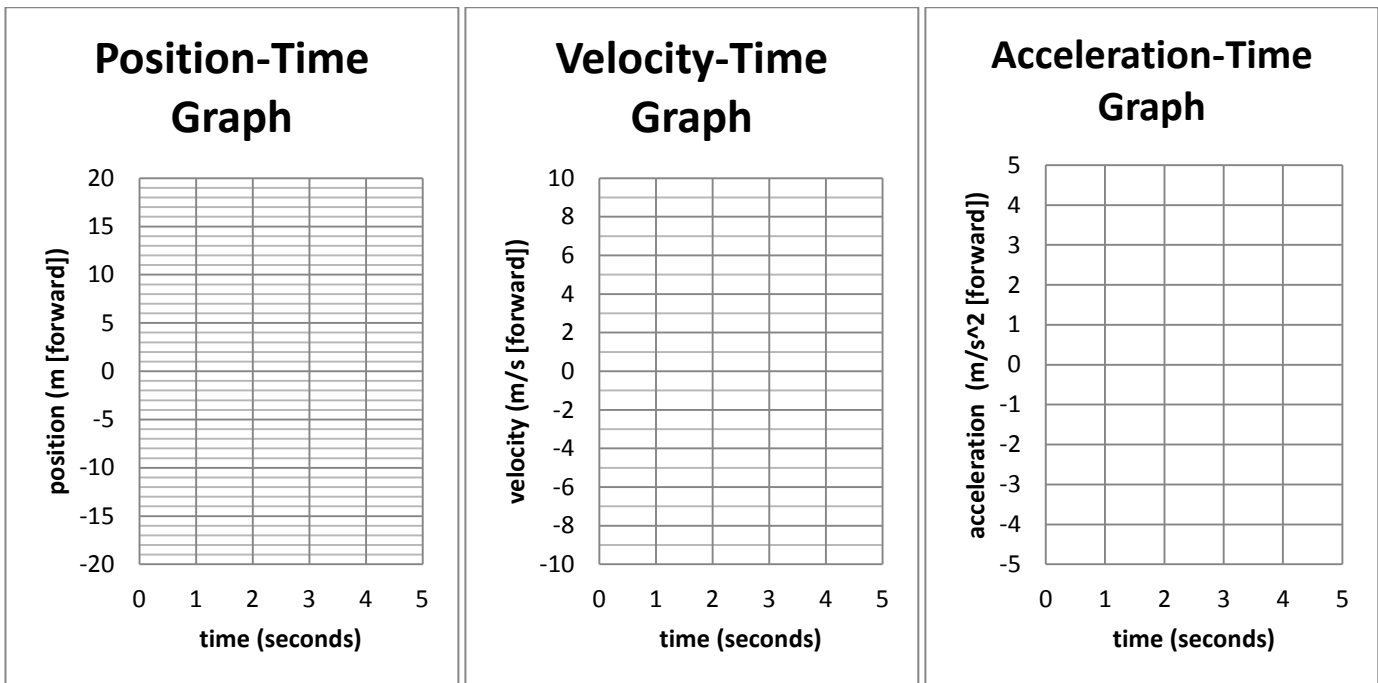
Moving Forward and Accelerating Backward

A person starts at the origin and is moving forward with a starting velocity of 6 m/s. From here, they accelerate backward at 2 m/s².



Moving Backward and Accelerating Forward

A person starts at the origin and is moving backward with a starting velocity of 4 m/s. From here, they accelerate forward at 2 m/s².



Comparison of d-t, v-t and a-t Graphs

The 3 graphs below show all describe the motion of the same object.

