

## Acceleration Introduction

1. Cart released from rest at the top of the ramp
  - a) Draw a FBD at the top and middle of the ramp.
  - b) Make a motion Map (include direction of acceleration)
  - c) Sketch the shape of the x-t, v-t, and a-t graphs.

2. Cart pushed up the ramp in a way that allows it to come back down the incline plane.
  - a) Draw a FBD at the middle of the ramp on the way up, the top of the ramp, and the middle of the ramp on the way down.

- b) Make a motion Map (include direction of acceleration)

- c) Sketch the shape of the  $x$ - $t$ ,  $v$ - $t$ , and  $a$ - $t$  graphs.

3. Picket fence falling through Photogate
  - a) Draw a FBD

b) Make a motion Map (include direction of acceleration)

c) Sketch the shape of the x-t, v-t, and a-t graphs.