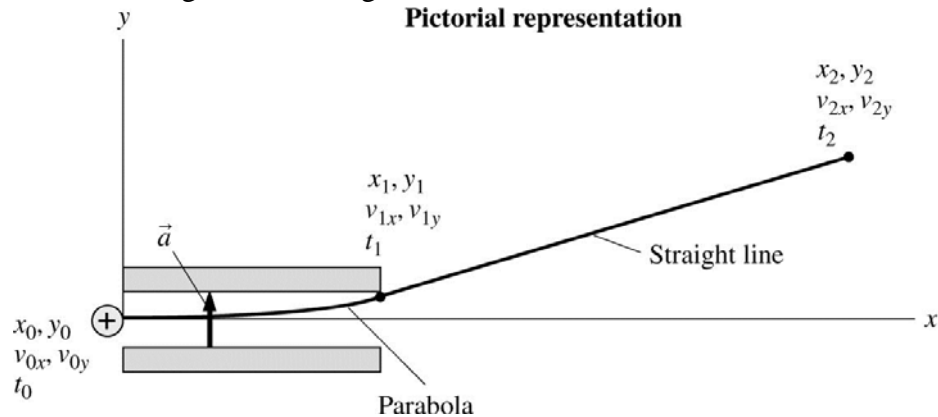


1. Solve problem 4.68
2. Solve problem 4.77 using the following variables shown.



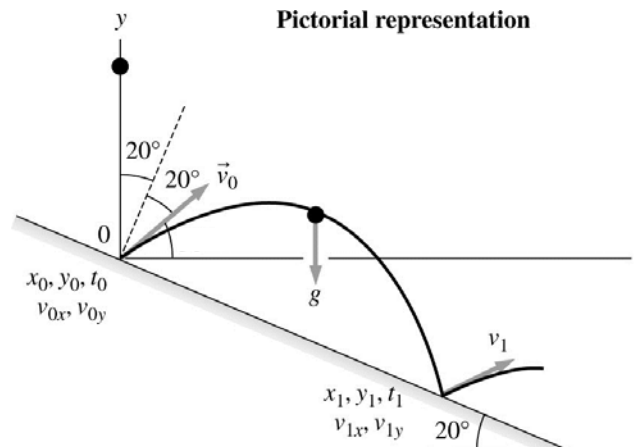
A few steps:

- Find the time taken for the ions to cross the plates and the time taken for them to cross the remaining part of the trip.
- Find the velocity and position when the particles exit from the plate in terms of variables. (This phase will have acceleration)
- Using these as the initial quantities for the next phase (outside the plate with no acceleration) find the expressions for position in the y direction. Use the given information.

3. Solve Problem 4.81.

A few steps:

- Use the information shown to find the initial launch angle and solve the problem.



4. Problem 6.28. Make sure you draw the freebody diagram of the beam, and show the axes you choose to analyze the problem.
5. Solve problem 6.11. Make sure you draw free body diagram of the box and shown the axes you use to analyze the motion.