Physics 122
Chapter 17 Problem Assignment
Work the Additional Problem last if you choose to do it.

Questions from the text 1, 2, 8, 11

Problems from the text 4, 5, 10, 16, 19, 36, 40, 50, 63

Optional Additional Problem

A1 A parallel plate capacitor has square plates that are L meters on a side and that are separated by D meters. A charge -Q is placed on the top plate and a charge +Q is placed on the bottom plate. As indicated below, a mass m is shot in from the side and just crashes into the edge on the lower plate on its way out of the capacitor. If the speed of the mass when it entered was V, what must the charge on the mass have been? Assume that the capacitor is in deep space. There is no gravitational field present in this problem. Your answer will be given in terms of L, D, Q, m, and V.