

MSC 1012 questions for Chapter 8 set 2

Forces between charges:

NAME _____

1) What is the force between an electron and a proton that are 2.0 nm apart?

ANS _____

2) A capacitor is charged with $2.5 \mu\text{C}$ on both plates. The plates are separated by a thin insulating foil that is 0.15 mm thick. What is the force between the two plates?

ANS _____

3) From question 2), if the foil has a total surface area of 3.0 m^2 , what would be the pressure exerted on the foil? (Assuming the electric permeability the same as vacuum.)

ANS _____