ECE110 - Quiz #1
Only non-programmable calculators are allowed.

First Name: _____ *Last Name:* _____

*Student #:*_____ *Tutorial Section:* _____

[5 Marks] Three point charges $Q_1=2nC$, $Q_2=2nC$, and Q_3 are located in Cartesian coordinate system at *A(-3cm,0)*, *B(3cm,0)*, and *C(0,1cm)* respectively, as shown below. Calculate charge Q_3 such that the total electrostatic force exerted on an electron placed at point *D(0, -4cm)* is equal to zero.