Quiz #4 Ch21&22

Name: Solution ID#: Sec#:

Q1 Three charges (q1=q2= –2.5 μC and Q), are located at equal distance d from the origin, as shown in Figure. If the resultant electric field at Point P due to the three charges is zero, what are the magnitude and sign of charge Q?

2d2

E2

E1

P

d

d

d

d

y

x

q2

q1

Q

EQ

Q2 An electric dipole with dipole moment is in an electric field . If an external agent turns the dipole until its electric dipole moment is, how much work the external agent does.