Coulomb's Law Math Help

$$F = K\frac{q_A q_B}{r^2}$$

A balloon is rubbed against a jacket and gains a charge of -8 microcoulombs. What is the electric force between the balloon and the jacket if the 2 are separated by 5 cm? (Assume these are point charges)

$$F = K\frac{q_A q_B}{r^2}$$

Givens:
r = 0.05 meters
K_c = 8.99 x 10^9 N*m^2/C^2
$q_{balloon}$ = -8 x 10^{-6} C
q_{jacket} = 8 x 10^{-6} C
F = _____

A proton and an electron are separated by a distance of 5.3 x 10⁻¹¹ meters.
Find the magnitude of the electric force and the gravitational force that each
particle exerts on the other.

$$F = K\frac{q_A q_B}{r^2}$$

Givens:
r = 5.3 x 10⁻¹¹ meters
K_c = 8.99 x 10⁹ N*m²/C²
m_e = 9.109 x 10⁻³¹ kg
G = 6.673 x 10⁻¹¹ N*m²/kg²
q_e = -1.6 x 10⁻¹⁹ C
q_p = 1.6 x 10⁻¹⁹ C
m_p = 1.673 x 10⁻²⁷ kg
F = _____

2 point charges of +60 μC and +50 μC exert a force on each other of 175 N.
what is the distance between the 2 charges?

$$F = K\frac{q_A q_B}{r^2}$$

Givens:
K_c = 8.99 x 10⁹ N*m²/C²
q_A = 60 x 10⁻⁶ C
q_B = 40 x 10⁻⁶ C
F = 175 N
r = _____