Electric Force Equilibrium Math Help

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

There are 3 point charges that lie along the x-axis. (See diagram) q_1 has a charge of 15μC and is located at x = 2 cm. q_2 has a charge of 6 μC and is located at the origin. At what point on the x-axis must a negative charge (q_3) be placed so the resulting force is zero?

We will do this one IN CLASS

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

q_1 q_3 q_2

2 m

Givens:
$r_{1,2}$ = 2 meters
q_1 = 15 x 10^{-6} C
q_2 = 6 x 10^{-6} C
K_C = 8.99 x 10^9 N*m^2/C^2
d_{q3} = _____