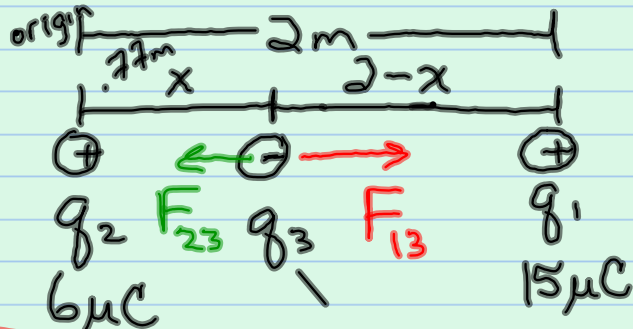


Ex 15.3 #14, 49

Ex 15.4, 15.5 #17, 24, (28, 37 I'll help)

Ex 15.3 p 474

? $F_e = 0$



$$F_{23} = \frac{kq_2q_3}{r^2} = \frac{kq_1q_3}{r^2} = F_{13}$$

μ^{-6}

$$\frac{q_2}{r^2} = \frac{q_1}{r^2}$$

$$\frac{6 \times 10^{-6}}{x^2} = \frac{15 \times 10^{-6}}{(2-x)^2}$$

$$6(2-x)^2 = 15x^2$$

$$6(2-x)(2-x) = 15x^2$$

$$6(4 - 4x + x^2) = 15x^2$$

$$24 - 24x + 6x^2 = 15x^2$$

$$9x^2 + 24x - 24 = 0$$

$$3x^2 + 8x - 8 = 0$$

$$x = .77m$$