

$$F = k * \frac{q' * q}{r^2} \quad (1)$$

$$F = 8.99 * 10^9 * \frac{N * m^2}{C^2} * \frac{(1.60 * 10^{-19}C)^2}{(2.0 * 10^{-15}m)^2} \quad (2)$$

$$F = 3.596 * 10^{20}N \quad (3)$$

$$a = \frac{F}{m} \quad (4)$$

$$a = \frac{3.596 * 10^{20}N}{1.67 * 10^{-27}kg} = 2.1532 * 10^{47} \frac{m}{s^2} \quad (5)$$