

$$a) (6.2 \times 10^{20}) \times (3.8 \times 10^{-18}) = 6.2 \times 3.8 \times 10^{(20+(-18))} = 6.2 \times 3.8 \times 10^2 = 23.56 \times 10^2 = 2.356 \times 10^3$$

$$b) (600) \times (10 \times 10^8) = 600 \times 10 \times 10^8 = 6000 \times 10^8 = 6 \times 10^3 \times 10^8 = 6 \times 10^{(8+3)} = 6 \times 10^{11}$$

$$c) 5.4 \times 10^{-12} \text{ divide by } 3.1 \times 10^{-15} = (5.4 / 3.1) \times 10^{(-12 - (-15))} = 1.741935484 \times 10^3$$