Other conversions/dimensional analysis practice

1. Jacques, the speeding Canadian, gets pulled over in the US. His speedometer reads 120 km/hour.   How fast is he going in ft/sec? (0.305 m = 1 ft)

2. Light travels at 3.0 x 10^8 m/s. How many miles/hour is this?

3. A swimming pool measures 2.0 m x 25.0 m x 15.0 m. What is the volume of the pool in m^3? In cm^3? In km^3?

4. Chatfield reservoir holds 0.033 km^3 of water. How many gallons is this? (1 cm^3 = 1 mL, 1 gallon = 3.785 L)

5. The density of water is 1.00 g/cm^3. Convert this to kg/dm^3.

6. A pressure washer might have a nozzle pressure of 500 pounds/in^2. Convert this to kg/m^2. (454 g = 1 pound, 2.54 cm = 1 in)

Other conversions/dimensional analysis practice

1. Jacques, the speeding Canadian, gets pulled over in the US. His speedometer reads 120 km/hour.   How fast is he going in ft/sec? (0.305 m = 1 ft) 110 ft/s

2. Light travels at 3.0 x 10^8 m/s. How many miles/hour is this? 6.7x10^8 mi/hr

3. A swimming pool measures 2.0 m x 25.0 m x 15.0 m. What is the volume of the pool in m^3? In cm^3? In km^3? 750 m^3, 7.5x10^8 cm^3, 7.5x10^{-7} km^3

4. Chatfield reservoir holds 0.033 km^3 of water. How many gallons is this? (1 cm^3 = 1 mL, 1 gallon = 3.785 L) 8.7x10^9 gal

5. The density of water is 1.00 g/cm^3. Convert this to kg/dm^3. 1.00 kg/dm^3

6. A pressure washer might have a nozzle pressure of 500 pounds/in^2. Convert this to kg/m^2. (454 g = 1 pound, 2.54 cm = 1 in) 4x10^5 kg/m^2