Worksheet - Dimensional Analysis

Name_____
Period _____
Date_____

Convert each of the following as indicated. Use dimensional analysis. Show all work.

1. 5.93 $cm^3 \rightarrow m^3$ *(5.93 X 10^{-6} m^3)*

2. 1 $ft^3 \rightarrow m^3$ *(0.028 m^3)*

3. 175 lbs → kg *(79.5 kg)*

4. 22.4 kg/L to kg/mL *(0.0224 kg/mL)*

5. 25 m/s to miles/hr *(56 mi/hr)*

6. 8.24 g/cm^2 to mg/mm^2 *(82.4 mg/mm^2)*

7. 3.8 km/sec to miles/year *(7.43 x 10^7 mi/yr)*

8. 708 lb/ft^3 = _____ g/cm^3 *(11.35 g/cm^3)*

9. Traveling at 65 miles/hour, how many minutes will it take to drive 125 miles to San Diego? *(115 min)*