

Name: \_\_\_\_\_

Per: \_\_\_\_\_

Dimensional Analysis  
Practice Problems

Answer the following problems, on a separate piece of paper, using complete setups and answers with units and the correct number of significant digits.

1. 14 cm to meters
2. 116.5 m to kilometers
3. 0.006394 km to centimeters
4.  $1.47 \times 10^5$  mm to kilometers
5. 138.4 oz to grams
6. 23.6 ft to centimeters
7. 13.6 L to U.S. liquid quarts
8. 8080 mm to cm
9. 4 cups to mL
10. 0.0055 qt to  $\text{cm}^3$
11. 900 mL to qts
12.  $2.2 \times 10^3$  dm to mi
13.  $1.10 \times 10^7$  L to pt
14.  $5.5 \times 10^{-3}$  km to millimeters
15.  $1.00 \times 10^6$  seconds to days
16.  $2.2 \times 10^{-3}$  mm to inches
17.  $6.02 \times 10^4$  grams to pounds
18. How many centimeters in 3.0 miles?
19. How many gallons are there in 43 liters?
20. How many inches are in 6.0 m?
21. 20.6 km/hr to miles per hour
22. 3.49 km/hr to meters per second
23.  $8.05 \times 10^5$  g/ $\text{cm}^3$  to kilograms per liter