

Section 2.2 (pages 38-40)

Complete the following assignment in your class notebook
with the heading: Dimensional Analysis Practice

Use the relationships below to solve the following problems using proper dimensional analysis as shown in class. Include correct units, significant figures, and Box final answers.

$$1 \text{ inch} = 2.54 \text{ cm}$$

$$1 \text{ mile} = 5280 \text{ ft.}$$

$$1 \text{ day} = 24 \text{ hrs}$$

$$1 \text{ yard} = 3 \text{ ft.}$$

$$1 \text{ min} = 60 \text{ sec}$$

$$1 \text{ yr} = 365 \text{ days}$$

$$1 \text{ mile} = 1.61 \text{ km}$$

$$1 \text{ hour} = 60 \text{ min}$$

$$1 \text{ atm} = 760 \text{ mm Hg}$$

- 1.) 47.0 inches = ? ft.
- 2.) 2.30 miles = ? km
- 3.) 4.75 hrs = ? min
- 4.) 87.0 min = ? days
- 5.) 7.32 atm = ? mm Hg
- 6.) 734 sec = ? years
- 7.) 95.0 mm = ? yards
- 8.) 24.5 miles/hour = ? km/min
- 9.) 62.0 sec/yard = ? hrs/ft.
- 10.) 70.0 mm/sec = ? miles/yr