

Homework #1

- 1- (*Average speed in miles*) Assume a runner runs **14** kilometers in **45** minutes and **30** seconds. Write a program that displays the average speed in miles per hour. (Note that **1** mile is **1.6** kilometers.)
- 2- (*Area and perimeter of a rectangle*) Write a program that displays the area and perimeter of a rectangle with the width of **4.5** and height of **7.9**.
- 3- (*Compute the volume of a cylinder*) Write a program that reads in the radius and length of a cylinder and computes the area and volume using the following formulas:
area = radius * radius * PI
volume = area * length
(Note that **PI** is **3.14**)
- 4- (*Find the number of years*) Write a program that prompts the user to enter the minutes (e.g., 1 billion), and displays the number of years and days for the minutes. For simplicity, assume a year has **365** days. Here is a sample run:

```
Enter the number of minutes: 1000000000 
1000000000 minutes is approximately 1902 years and 214 days
```

- 5- (*Print a table*) Write a program that displays the following table:
- | a | b | pow(a, b) |
|---|---|-----------|
| 1 | 2 | 1 |
| 2 | 3 | 8 |
| 3 | 4 | 81 |
| 4 | 5 | 1024 |
| 5 | 6 | 15625 |