1.8 (Area and perimeter of a circle) Write a program that displays the area and perimeter of a circle that has a radius of 5.5 using the following formula:

\[
\text{perimeter} = 2 \times \text{radius} \times \pi \\
\text{area} = \text{radius} \times \text{radius} \times \pi
\]

1.9 (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 using the following formula:

\[
\text{area} = \text{width} \times \text{height}
\]

1.10 (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.)

1.11 (Population projection) The U.S. Census Bureau projects population based on the following assumptions:

- One birth every 7 seconds
- One death every 13 seconds
- One new immigrant every 45 seconds

Write a program to display the population for each of the next five years. Assume the current population is 312,032,486 and one year has 365 days. *Hint:* In Java, if two integers perform division, the result is an integer. The fraction part is truncated. For example, \(5 / 4\) is 1 (not 1.25) and \(10 / 4\) is 2 (not 2.5).

1.12 (Average speed in kilometers) Assume a runner runs 24 miles in 1 hour, 40 minutes, and 35 seconds. Write a program that displays the average speed in kilometers per hour. (Note that 1 mile is 1.6 kilometers.)