

Variables - Exercise 1

Directions:

- Proper naming of Variables (variables that can tell me in the name what it is used for)
- Print sentence(s) that output all the variables used in the sketch.
- Explain the purpose of the program by using comments at the beginning of each sketch or section of code.
- Use proper indentation of code. (Check coding standards document in Introduction to Processing Notes if you aren't sure what proper indentation looks like.)

1. Sum of Two Numbers

Write a Sketch that stores the integers 62 and 99 in variables and stores their sum in a variable named Total. Print out all variables using a sentence.

2. Sales Prediction

The East Coast Sales division of a company generates 62 percent of total sales. Based on that percentage, write a Sketch that will predict how much the East Coast division will generate if the company has \$4.6 million in sales this year. Hint: use the value 0.62 to represent 62 percent.

3. Land Calculation

One acre of land is equivalent to 43,560 square feet. Write a Sketch that calculates the number of acres in a tract of land with 389,767 square feet. Hint: Divide the size of the tract of land by the size of an acre to get the number of acres.

4. Miles Per Gallon

A Car's miles-per-gallon (MPG) can be calculated with the following formula:

$$\text{MPG} = \text{Miles driven} / \text{Gallons of gas used}$$

Write a Sketch that asks the user for the number of miles driven and the gallons of gas used. It should calculate the car's miles-per-gallon and display the result on the screen.

5. Circuit Board Profit

An electronics company sells circuit boards at a 40 percent profit. If you know the retail price of the circuit board, you can calculate its profit with the following formula:

$$\text{Profit} = \text{Retail Price} \times 0.4$$

Write a Sketch that asks the user for the retail price of the circuit board, calculates the amount of profit earned for that product, and displays the results to the screen.