

TIPP&SEE Math Chat

NAME _____		
Lesson 2-2B		
SCRATCH ID _____	DATE _____	TIME _____

Objective: I can explore how to use variables to chat with the computer.

Scratch Link: Variables - Math Chat (<https://scratch.mit.edu/projects/239362753/>)

Start with **TIPP&SEE!**

Get a **TIPP** from the Project Page.

Read carefully: **Title**

Instructions

Purpose

Play the project and fill in your **input** to the computer and the computer's **output** to you.

- ① Fill in your input for length and width.

length

width

- ② Fill in the computer's output.

The area is:

- ③ Write a number sentence for the area: _____

- ④ Fill in the correct output.

The area is:

- ⑤ Was the computer's output correct? YES NO

SEE Inside.

Answer each question by looking at Sonia's **when this sprite clicked** script.

- ⑥ Circle the block that does a calculation:

length + **width**

say join **The area is:** **area** for 4 secs

- ⑦ Circle the block that places the calculated area into the **area** variable:

set **area** to **length** + **width**

say join **The area is:** **area** for 4 secs


- ⑧ Circle the block that displays the area in the output:

set **area** to **length** + **width**



say join **The area is:** **area** for 4 secs

TIPP&SEE Math Chat (continued)

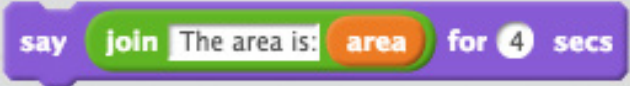

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Explore: Make these changes to Sonia's  script.

Run the program.
Enter different input each time.
Pay attention to the output each time.

- ⑨ Replace  with .
- Pay attention to what is displayed as output.

(Hint: Make sure when you put the variable in the operator block, the white circle lights up.)

- ⑩ Replace  with .
- Pay attention to what is displayed as output.

(Hint: If you have trouble, take out  and make , then put that inside the say block. Make sure the white square lights up before you let go.)

- ⑪ Now modify the project!
- Reload, Remix, Rename, and Share the project.
 - Correct the calculation for area.
 - Add code that will calculate and display the perimeter of the rectangle.
 - Write a number sentence for the perimeter: _____
 - Test and Save.

If you get done early:

- Make the computer's output show the number sentences for each calculation.
- Make your own number story. Make a program that asks the user for numbers, then calculates and displays the answer as output.