

Register/login at https://scratch.mit.edu

Learn to make code blocks.

1) Click on the **Add Extension** button, and add the **Pen** extension.

First draw a triangle.

Draw 3 sides, turning 120° each time.

2) Add the triangle code shown here:

Now make a block to draw each side.

3) Under My Blocks click

Make a Block

- 4) Type in the block name "draw side" then OK.
- 5) A block appears which where you **define** what it does. For now, make it move 200 steps:

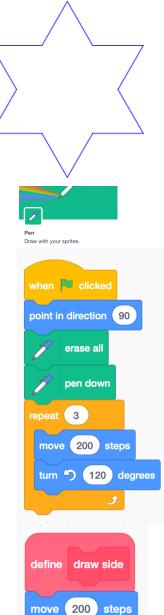
A new drawside block appears under My Blocks.

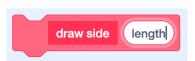
6) Replace the **move 200** steps in your **green flag** code with the new **draw side** block.

Your code blocks can have inputs.

Add an input for the **length** of the side.

- 7) Right-click then Edit your block under My Blocks.
- 8) Click Add an input (number or text).
- 9) Add the input name, "length". OK

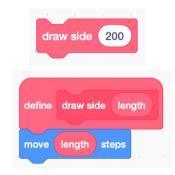


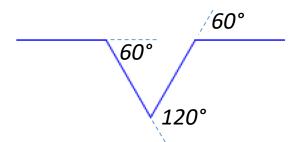


Add an input

Edit

- 10) A new slot appears for the input wherever you used the block. Add an input value, **200**.
- 11) Inside the block **definition**, *drag* the **length** input into the **move** block.





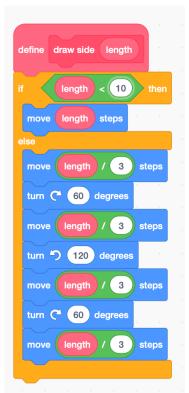
Check your code still works...

Now add a triangular outdent on each side.

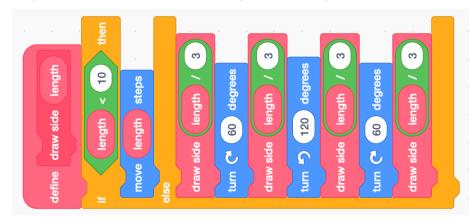
12) If the length is too small (less than 10) it does a basic move, otherwise it adds the out-dent with four moves.

The length of each of the four shorter line segments is **length divided by 3**, or **length /** 3.

What will happen if you replace the four moves (in the else) with draw side length / 3



Try it. Here's the complete definition.



Remember to **Save** your code with a good name.