

SCRATCH Snowflake

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

Learn to make code blocks.

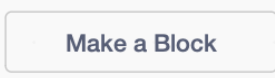
- 1) Click on the **Add Extension** button, and add the **Pen** extension.

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 
- 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:

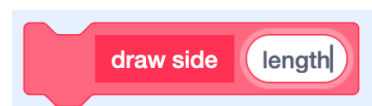
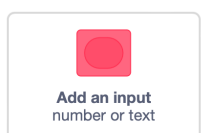
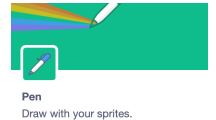
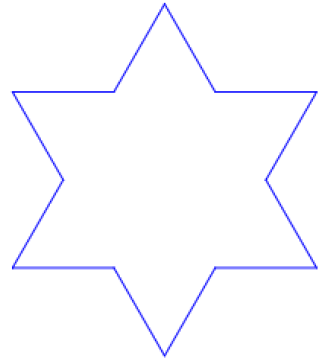
A new  block appears under **My Blocks**.

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

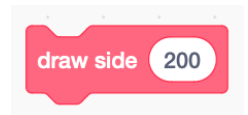
Your code blocks can have inputs.

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

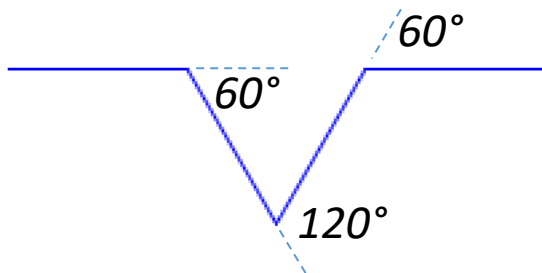
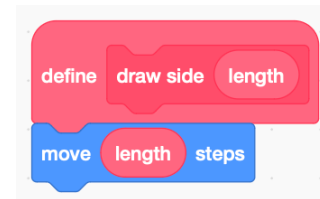
- 7) **Right-click** then **Edit** your block under **My Blocks**.
- 8) Click **Add an input** (number or text).
- 9) Add the input name, “**length**”. **OK**



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 out-dent on each side.

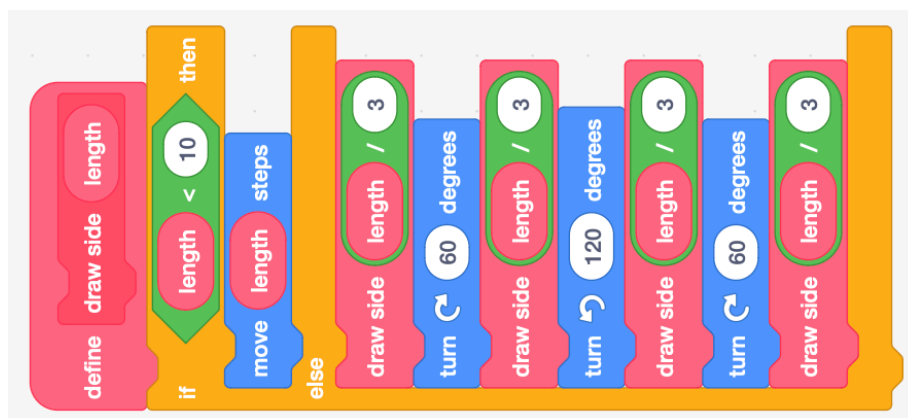
12) If the length is too small (less than 10) it does a basic move, otherwise it adds the out-dent with 4 moves, and 3 turns.

*The length of each of the four shorter line segments is **length divided by 3**, or $\text{length} / 3$.*

*What will happen if you replace the four **moves** (in the else) with*



Try it. Here's the complete definition.



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