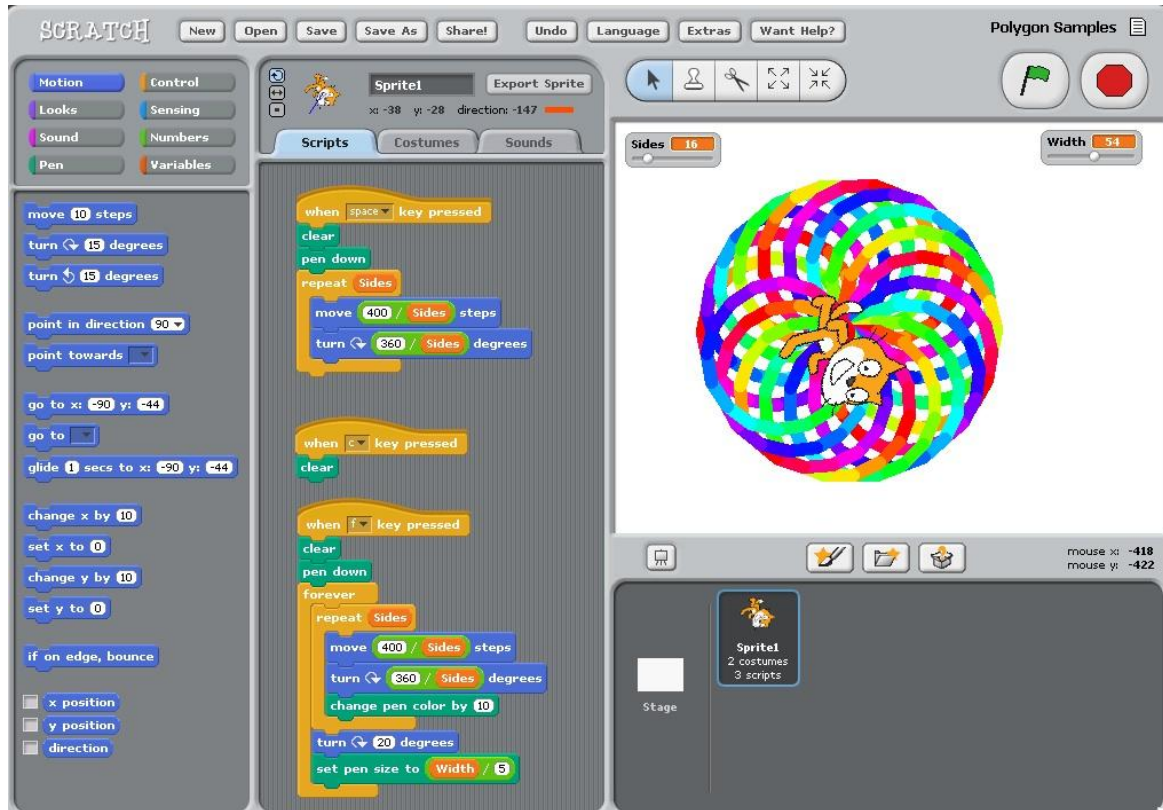
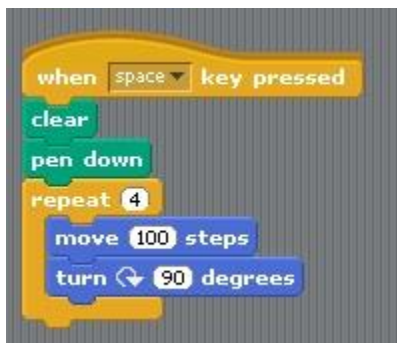


Scratch: Polygon Robot

Objective: This program will draw different designs based on changing variables such as number of sides, arc, radius, pen color, pen width,



1. **Open Scratch and Make Basic Draw-a-Square Script:**
 - a. Click Scratch Icon 1 time.
 - b. Keep the Cat. Add the following Scripts to draw a square



2. Change Square Script into Polygon Creator:

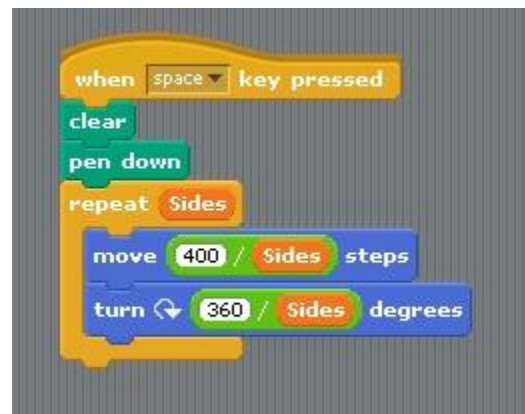
- Click on the Variables Tab.
- Click "Make a Variable"
- Type "Sides" into the Dialog Box and Click "OK"
- Double Click the "Sides" box on the world to make a Slider. Set Slider to 6



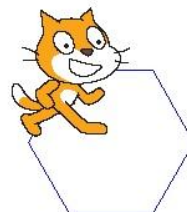
- Drag the following Blocks into the Scripts Pane. (The green division is found under "Numbers")



- Put these blocks into the Square Script



- Press the space bar. The Cat should draw a hexagon. Slide the slider up and down to create different Polygons.



3. **Make the Flower Creator Script:**

- a. Click on Variables and Make a Variable called "Width."
- b. Make the following Script below the Square Script



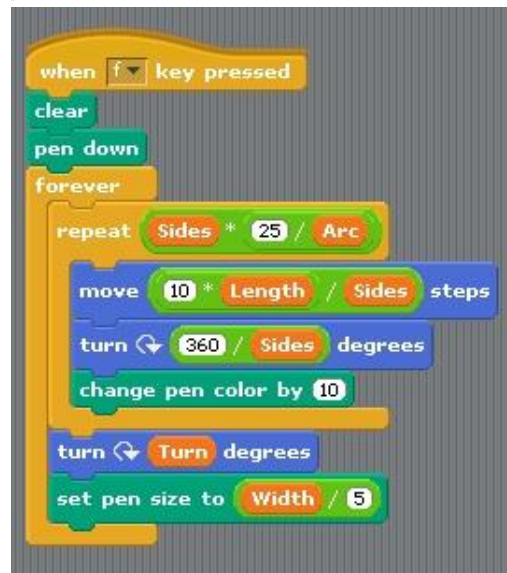
- c. Click the "f" key and your Cat should make some interesting designs. Click the Stop Sign to stop the Cat

4. Add More Variables

- a. Go to the Variables Tab and add the following variables



- b. Change the Flower Script to look like this



- c. Double Click all the Variables so they have sliders. Make some designs