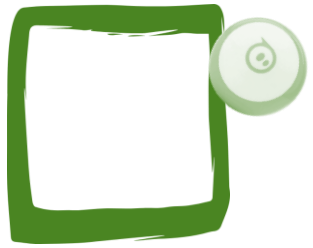
Spheros & Shapes Group Activities



We won't complete all of the following problems.

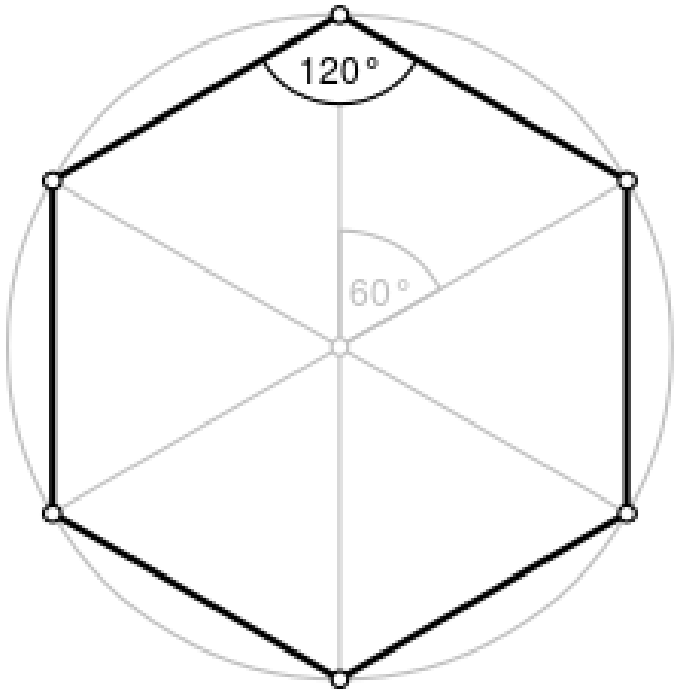
Your group will only complete one or two.

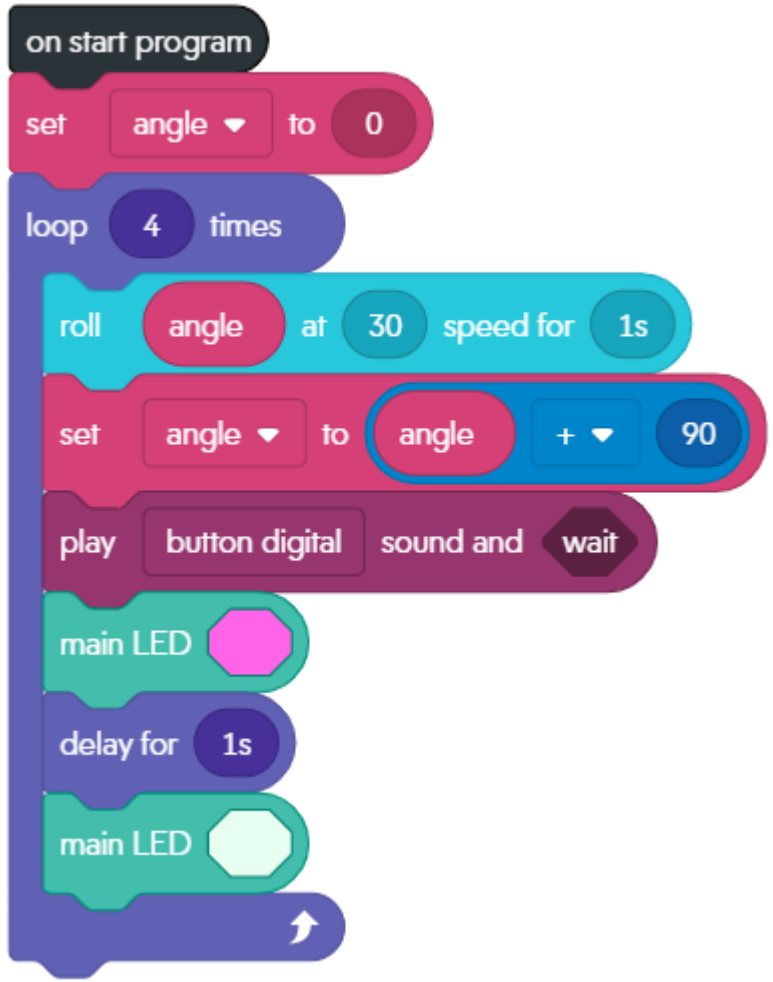
Start with Alligator. After you are done, we will discuss which one you should do next.

	Practice	More Practice
Problem 1	A - Alligator	B - Bat	C - Cat
Problem 2	D - Dog	E - Elephant	F - Fish
Problem 3	G - Giraffe	H - Horse	I – Iguana
TIPS		J - Jaguar

Adapt this code to make a hexagon instead.

Test it on your Sphero.

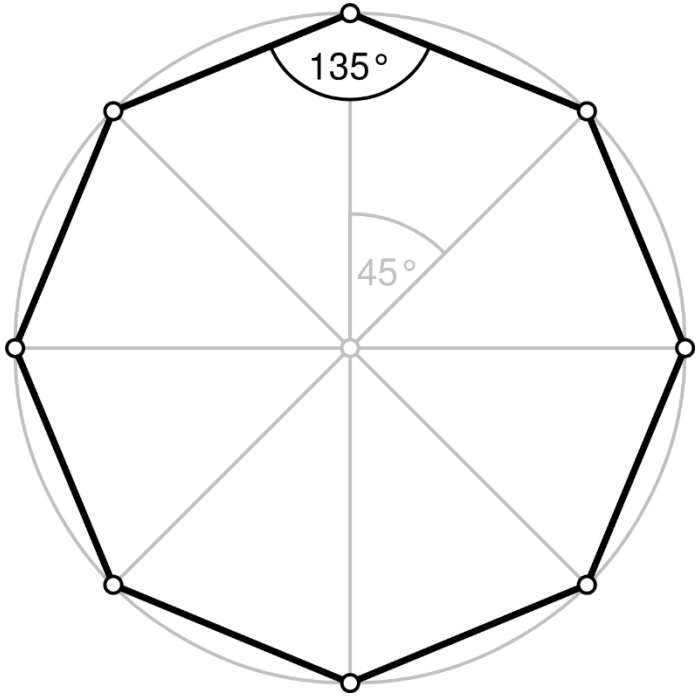


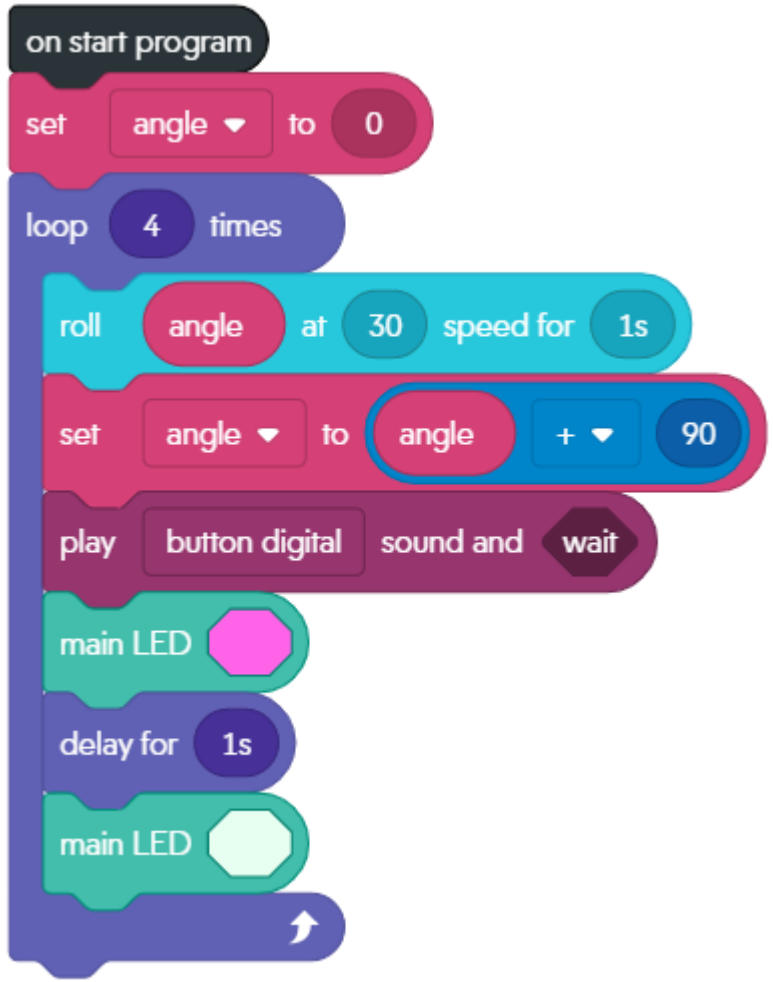


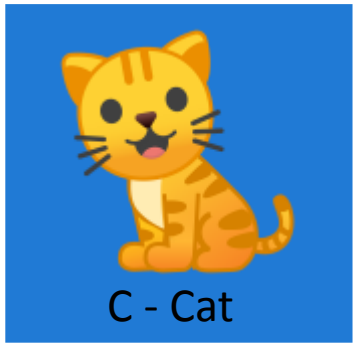
B - Bat

Adapt this code to make an octogon instead.

Test it on your Sphero.

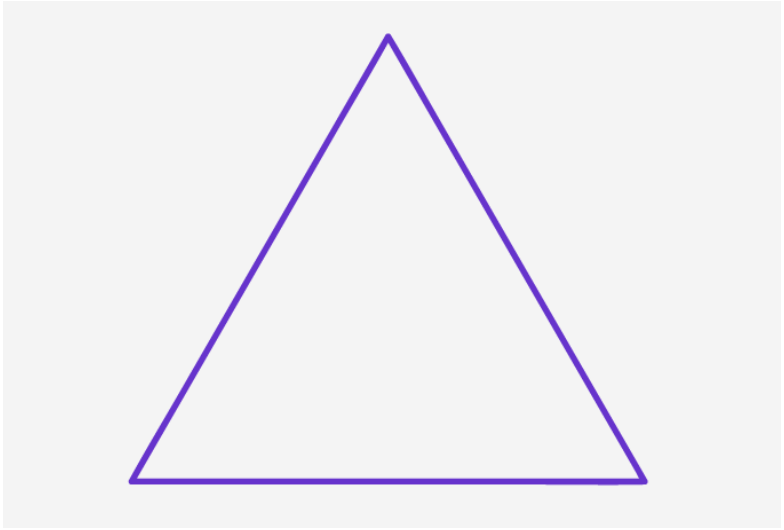


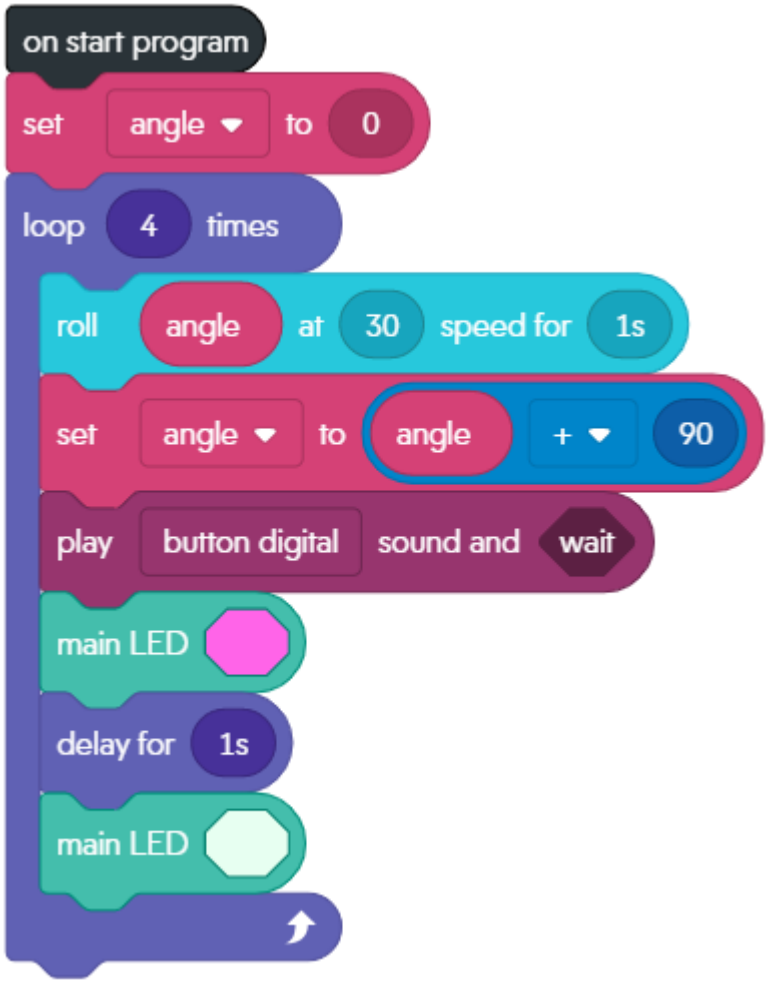


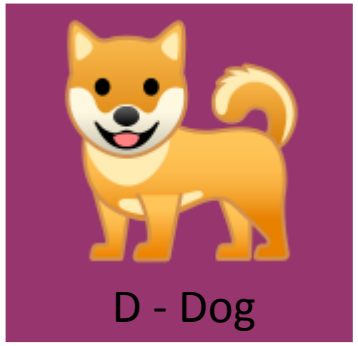


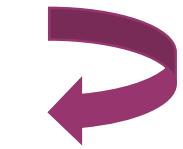
Adapt this code to make an equilateral triangle instead.

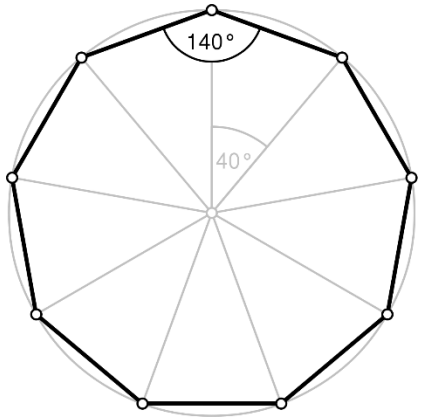
Test it on your Sphero.





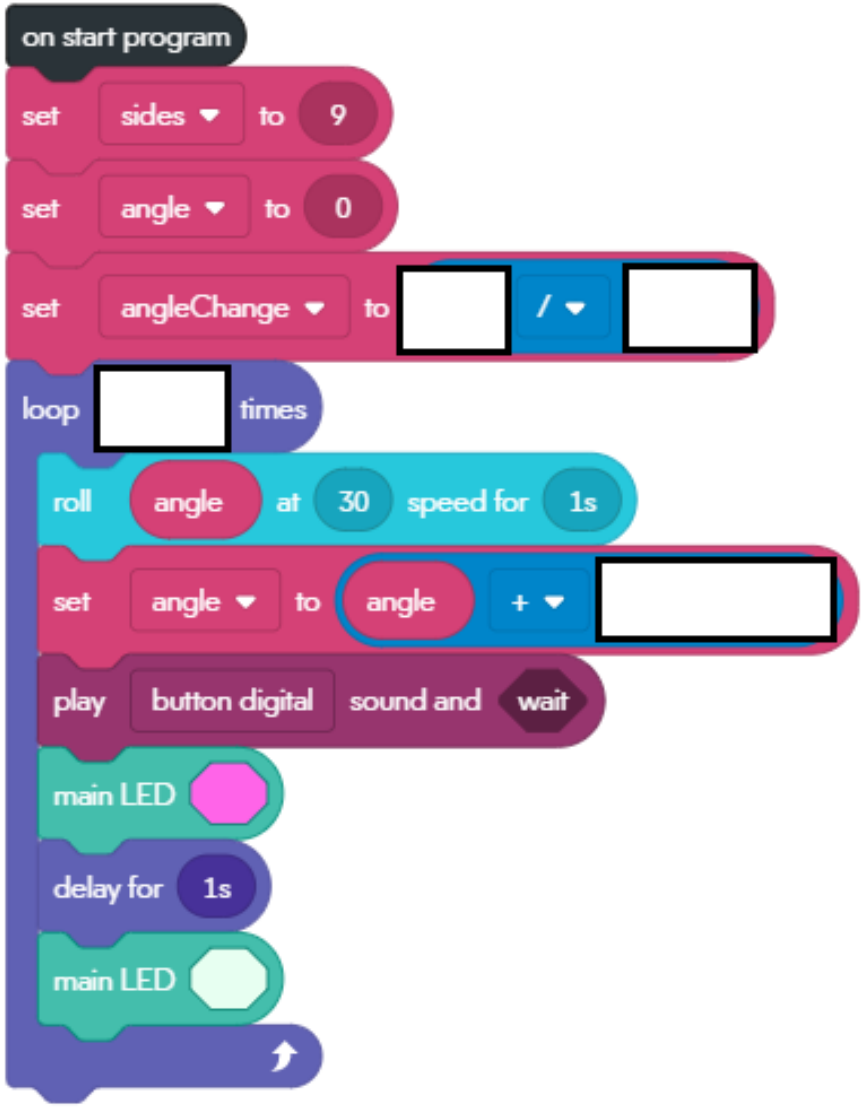


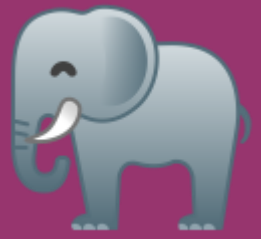




This program uses variables to make a nonogon (9 sided). If done correctly, once you have finished it, you will only need to change line 1 to be able to make any shape you would like.

Test it on your Sphero.

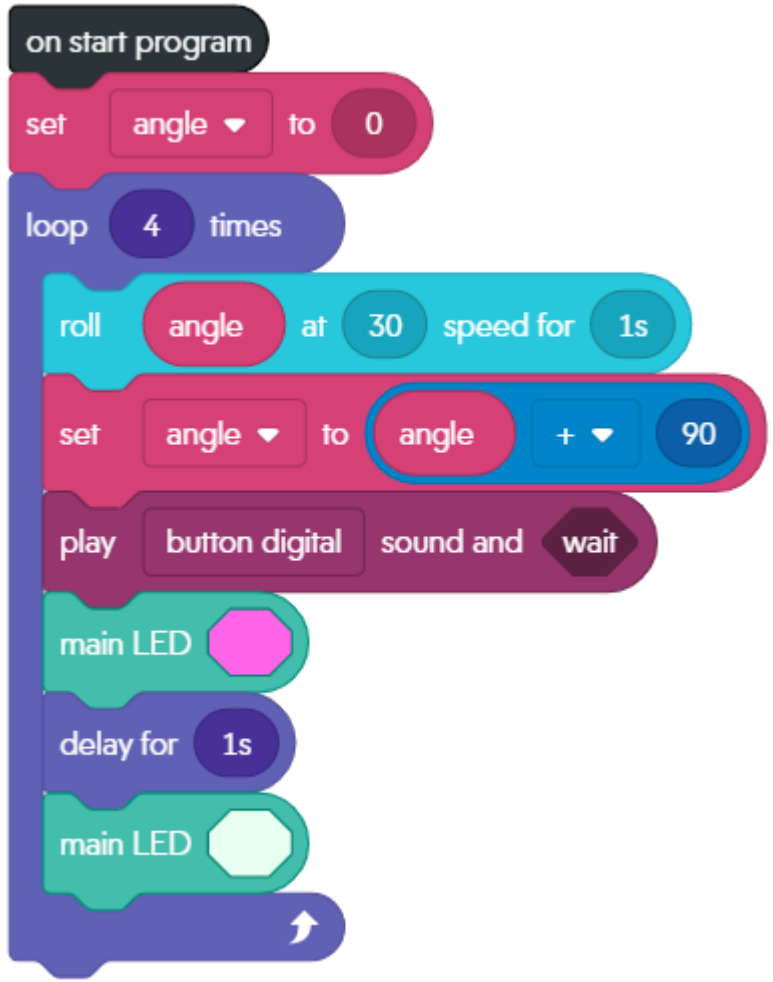




E - Elephant

Adapt this code to draw 3 squares.

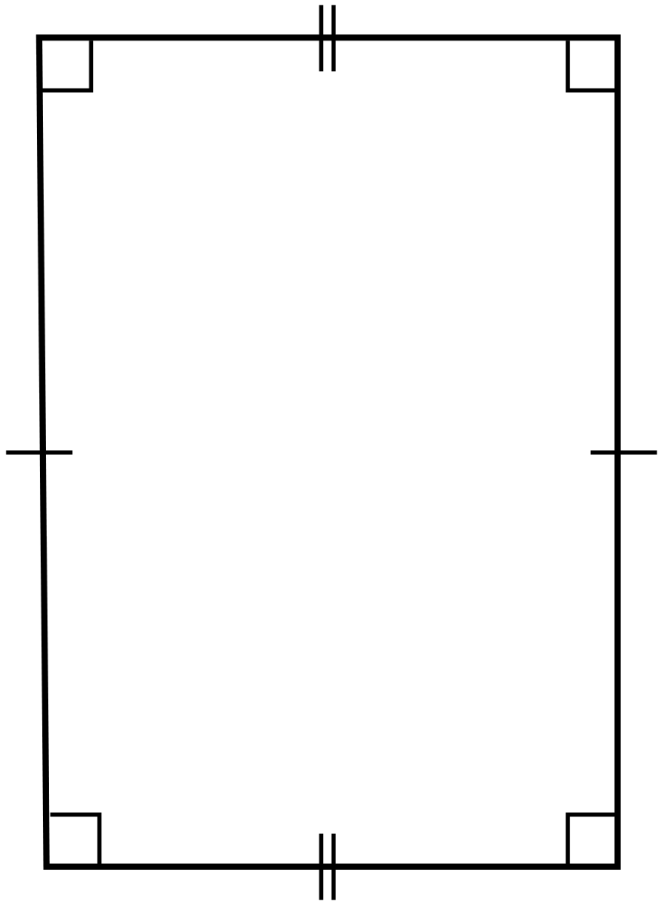
Test it on your Sphero.



F - Fish

Write code that uses a loop to make a rectangle. There should be two different side lengths.

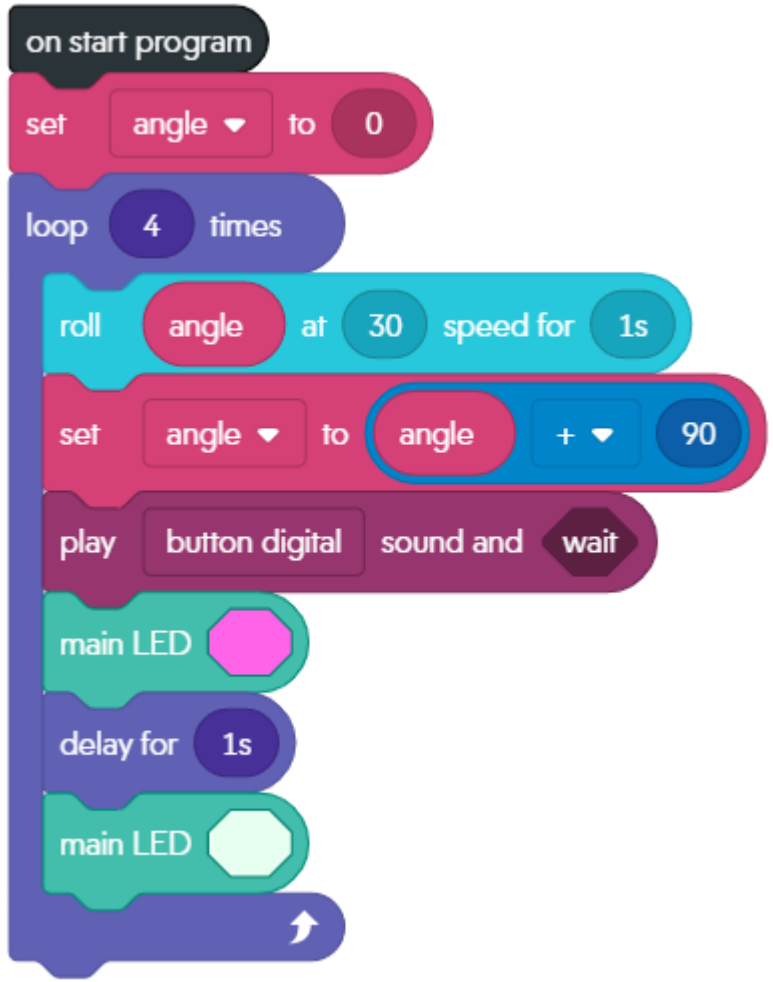
Test it on your Sphero.



G - Giraffe

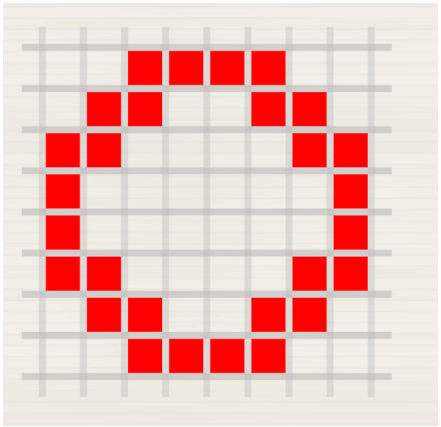
Write code that adds a variable to increase or decrease the size of the square.

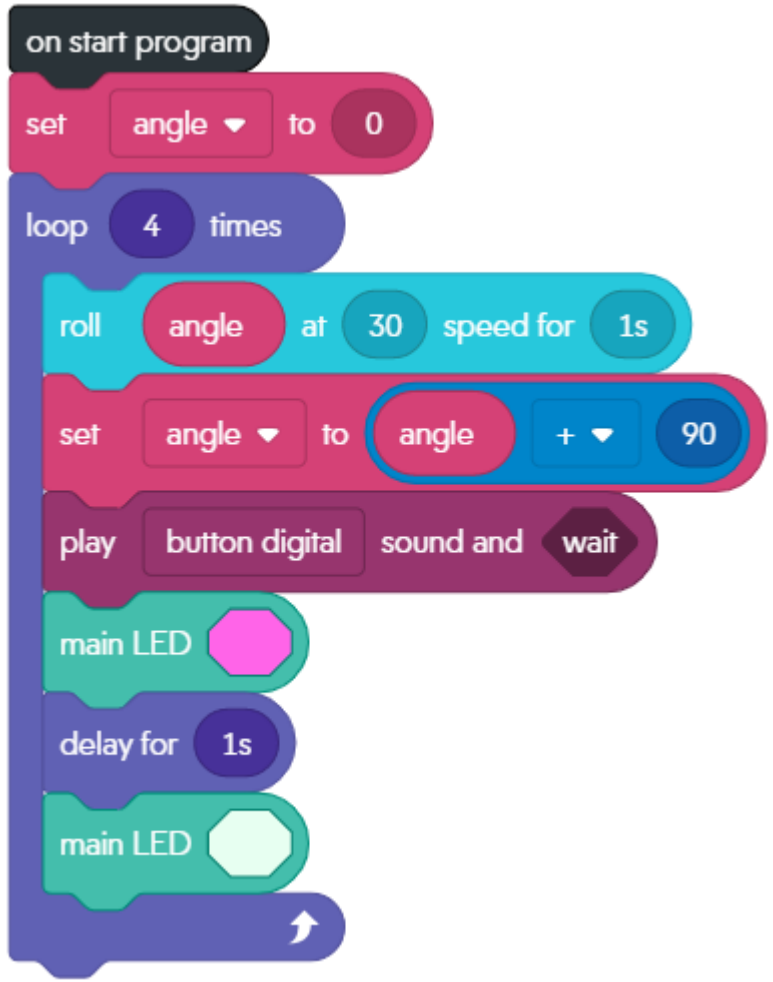
Test it on your Sphero.



H - Horse

Adapt this code to draw something that looks like a circle (humans are easily fooled). Take out the sounds and lights.

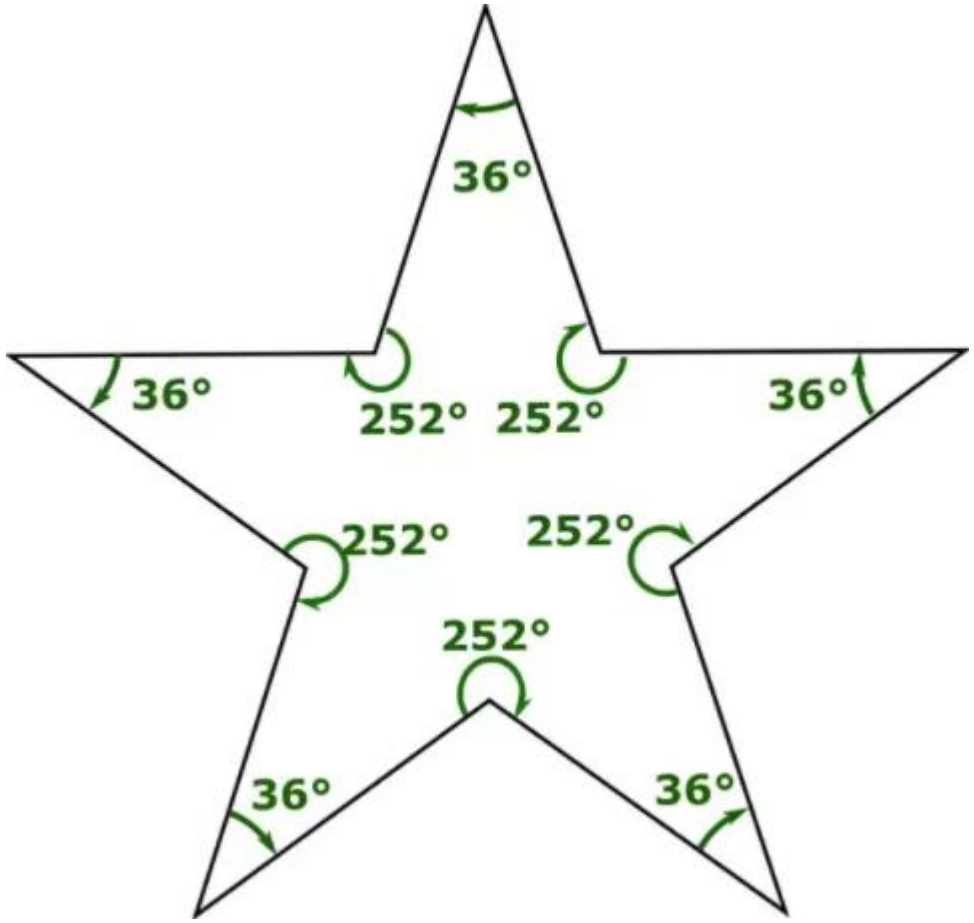




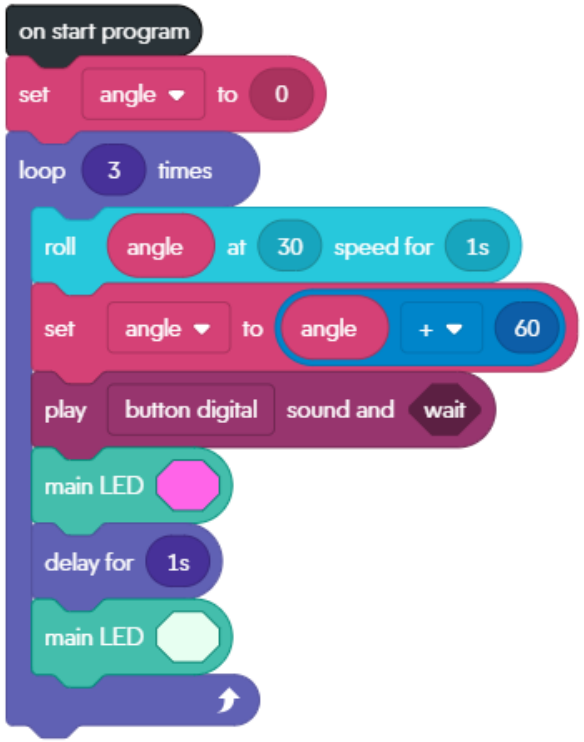
I – Iguana

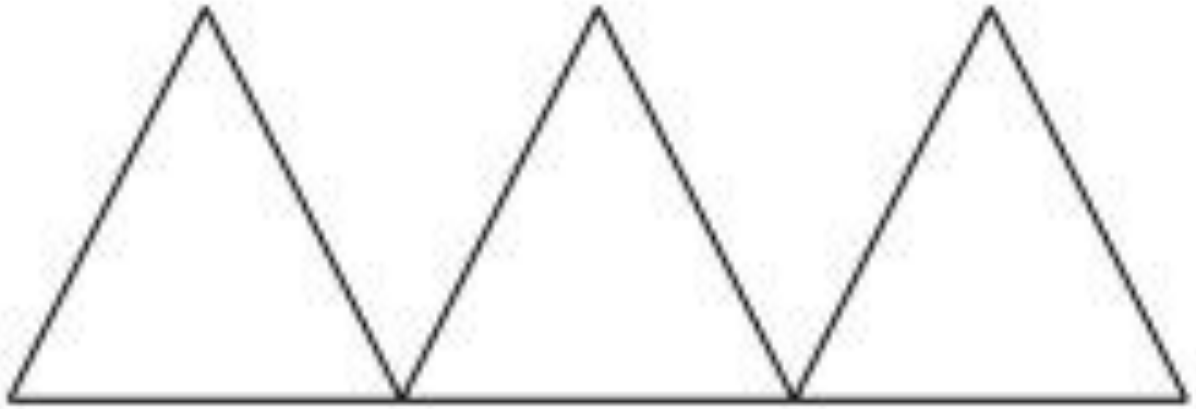
Write a program that would use a loop to draw a star.

Test it on your Sphero.

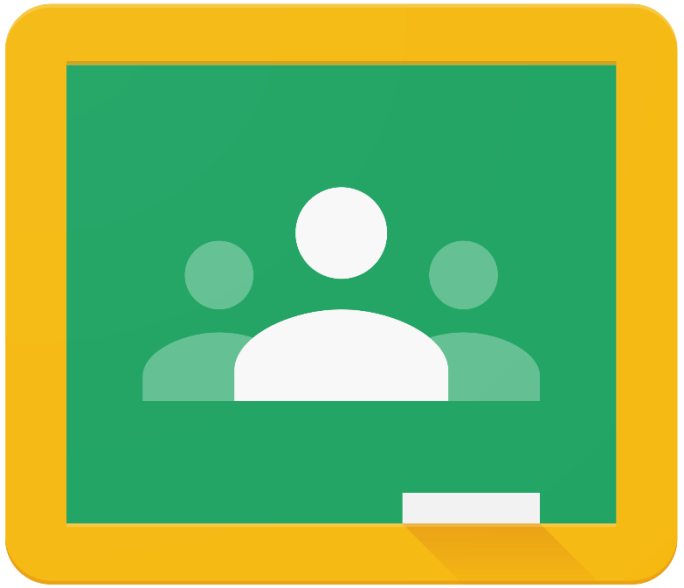


Write a program that draws three triangles in a row.





When you are done, there are check-your-understanding questions on Google Classroom.



Google Classroom