

Making a Design with Rotational Symmetry

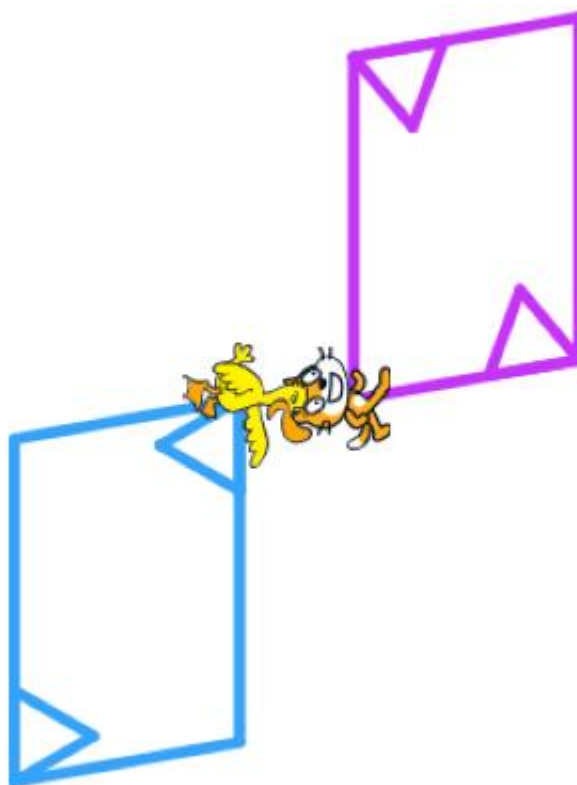
Using a Block-Coding Program

What to Do

Click the link to access Scratch: Cat, Duck, and the Balloon: Rotationally Symmetrical Designs (Shapes & Conditional Statements):

<https://scratch.mit.edu/projects/484712758/>

- Select **See Inside** to access the code.
- Alter the code so that the design has rotational symmetry.
- Look at your code. Do you see any repeated events? Nested events? If so, what do they create?



Making a Design with Rotational Symmetry (cont'd) Using a Block-Coding Program

Tips

- To begin, Duck's design is slightly off the screen.
Can you alter the code to account for that?
Consider altering the **Go to** block's values so Duck's design begins higher up on the Cartesian plane.
- Change one thing at a time. Talk about what you are changing and why.
- Make sure the design has rotational symmetry.
- A balloon is part of this program. The balloon is there to help you think about different aspects of this block coding program.
The balloon's code is based on Conditional Statements ("If ... then" or If ... then ... else"). Try altering the conditions.
What happens when the balloon contacts the other sprites?