Geometry-program:
Tips on completing the program.

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This document explains how the “unfinished” geometry world works.

First is an explanation of my first method.

There is a transition method for each shape. This will set the animation and camera view to the correct position.
You can customize the code to include the shapes in any order, or remove the shapes you don't want. Just make sure to include the correct transition method ahead of the calculations.

```javascript
// My First Method

world.transitionToCircle

// Dimension for the circle:

world.Radius set value to 2

Do in order

// calculate your answer for the circle’s circumference here

answer set value to 1

world.moveCircCircum userCircumference = answer

world.transitionToSquare

world.AtoBdimension set value to 3

Do in order

// calculate your answer for the square’s area here

answer set value to 1

world.moveSquareArea userArea = answer
```
There are world level variables that hold the dimensions for that shape before the calculation is done. The student will need to look at these to determine what values to use in their calculation.
My First Method

You can customize the program by changing the value of the dimensions and when the dimensions are changed.

For example in this case the dimension is changed to 5 before the area of the square is calculated.

This means that the square is 3 x 3 for the perimeter and 5 x 5 for the area.
The student then needs to set the variable answer to the correct value.

There are always more than one way for a student to accomplish this.

The animation methods that respond to the correct answer accommodate for small rounding differences that can happen with some kinds of calculations.
There are some useful math functions under World functions.

\[ a \text{ raised to the } b \text{ power } \] is one that students may find helpful.

Unfortunately the constant \( \pi \) is not found in Alice. Students can of course type in the number or they can use the variable created for this world under world properties.
Once the student has set their answer they can play the world. If the answer is correct the caterpillar will complete the animation if not the caterpillar will simply say “I can't do that”.

If changes are needed the student will then have to remember which animation did not work and try to fix it.