

Lesson 4: Worksheet 4.3 - Drive in a triangle and a hexagon

In this activity, you need to write two different programs to get your Edison robot to drive in the shape of a triangle, and then in a hexagon.

Your turn:

Task 1: Drive in a triangle

Write a program so that when your Edison robot drives, it makes a triangle.

Download your program and test it using activity sheet 4.2, placing your Edison at the 'start' point and following the lines. You can also make a larger triangle using coloured tape to mark the lines and a 'start' point on a desk or the floor.

1. How many times did your 'for' loop execute for your triangle shape?

Task 2: Drive in a hexagon

Write a program so that when your Edison robot drives, it makes a hexagon.

Download your program and test it using activity sheet 4.3, placing your Edison at the 'start' point and following the lines. You can also make a larger hexagon using coloured tape to mark the lines and a 'start' point on a desk or the floor.

2. How many times did your 'for' loop execute for your hexagon shape?

3. You should see a pattern emerging between the number of sides of the shape and the number of times the 'for' loop executes. Describe that pattern.

4. How many times you would need the 'for' loop to execute to draw a regular (meaning that all sides are equal) 12-sided shape?
