

# DroneBlocks / Python / Node-RED Programming with Tello

## Example Curriculum

**Module Name:** Advanced DroneBlocks with Tello

**Lesson Name:** Using Polygon Equation with Variables

The slide displays the formula for the interior angle of a polygon: 
$$\frac{(n-2)180}{n}$$
 where  $n = \text{number of sides}$ .

Below the formula is a video player with a play button. The video shows a drone flying a hexagon with an interior angle of  $120^\circ$ .

Three diagrams illustrate the application of the formula to different polygons, each starting with a drone takeoff:

- Pentagon:** Interior angle  $540^\circ$ . Exterior angles are  $72^\circ$  and  $108^\circ$ .
- Hexagon:** Interior angle  $120^\circ$ .
- Octagon:** Interior angle  $1080^\circ$ . Exterior angles are  $45^\circ$  and  $135^\circ$ .

[Using the Polygon Equation with Variables | DroneBlocks EDU](#)

(hover over and click the blue text above to view the preview video)

## OVERVIEW

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Understanding equations is an important aspect of any drone programmer's toolkit. This lesson extends upon the introductory hexagon lesson and discusses implementing the polygon equation in DroneBlocks code. Using variables and the polygon equation, Tello will be able to fly nearly every polygon shape imaginable.

**The DroneBlocks code for this lesson can be found below:**

<https://dev.droneblocks.io/tello.html?view=1&missionId=-LHnFzHdHEi4F6T43ay>