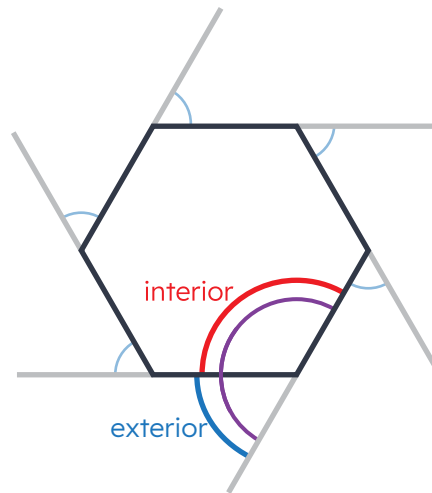
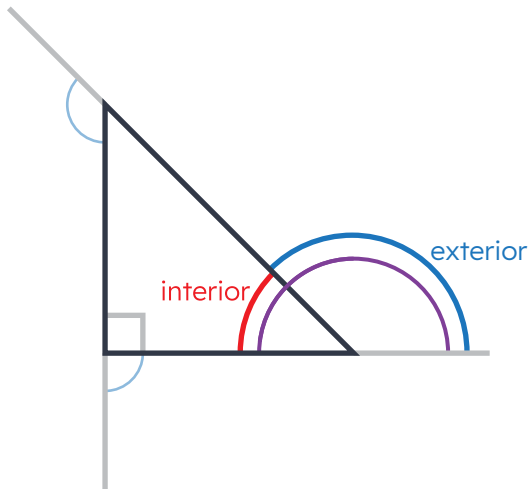




Programming Polygons

Understanding Different Types of Angles



Interior Angles

Interior angles are the angles made by intersecting lines and measured on the inside of a polygon.

To find the total measure of all interior angles of a regular polygon use the formula,

$$(n - 2) * 180$$

where **n** is the number of sides of the polygon.

Exterior Angles

Exterior angles are the supplementary angles made by extending a side of a polygon.

When you add the measures of the exterior angles of regular polygons it always equals 360° .

Supplementary angles are two angles that when the measures are added together it equals 180° .

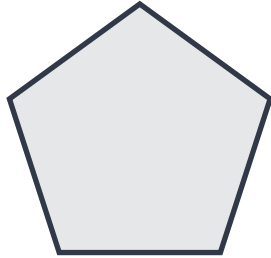
*The shapes on the challenge cards are examples of what you might draw with Evo. Some of your shapes may not look exactly like the card.



Ozobot 3D CAD Library Lesson

Programming Polygons - Challenge Cards (1/3)

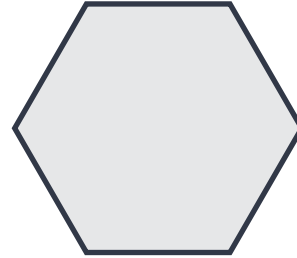
Program Evo to draw...



a regular pentagon.



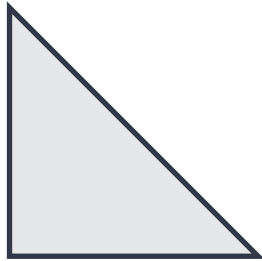
Program Evo to draw...



a regular hexagon.



Program Evo to draw...



a right triangle.



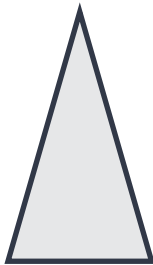
Program Evo to draw...



an obtuse triangle.



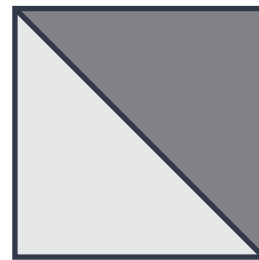
Program Evo to draw...



an acute triangle.



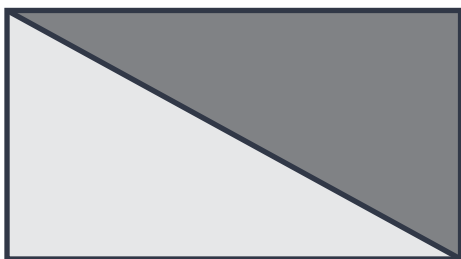
Program Evo to draw...



a square using two triangles.



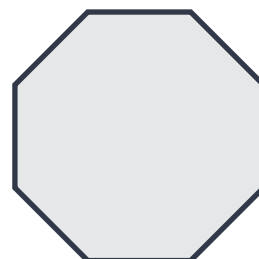
Program Evo to draw...



a rectangle using two triangles.



Program Evo to draw...



a regular octagon.





Ozobot 3D CAD Library Lesson

Programming Polygons - Challenge Cards (2/3)

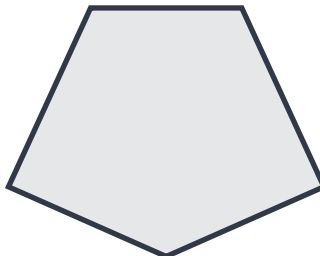
Program Evo to draw...



a rectangle using squares.



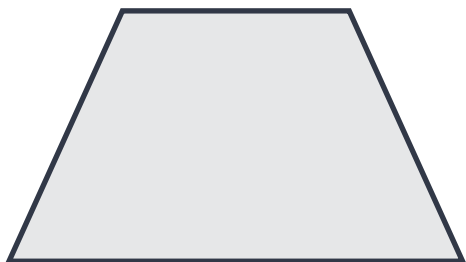
Program Evo to draw...



an irregular pentagon.



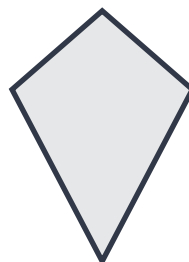
Program Evo to draw...



a trapezoid.



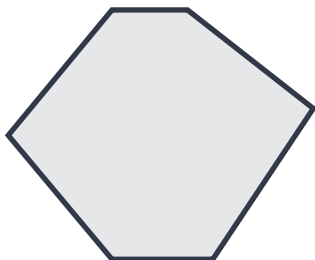
Program Evo to draw...



a kite.



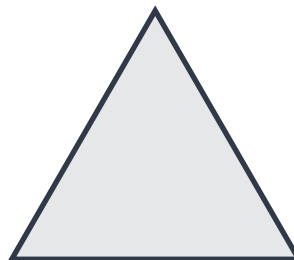
Program Evo to draw...



an irregular hexagon.



Program Evo to draw...



an equilateral triangle.



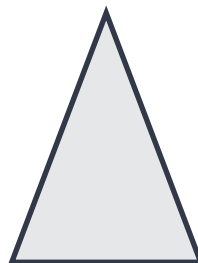
Program Evo to draw...



a scalene triangle.



Program Evo to draw...



an isosceles triangle.

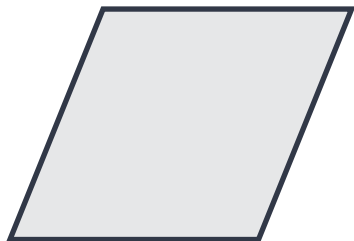




Ozobot 3D CAD Library Lesson

Programming Polygons - Challenge Cards (3/3)

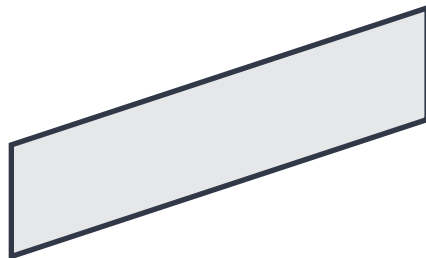
Program Evo to draw...



a rhombus.



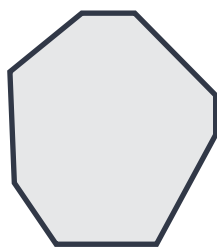
Program Evo to draw...



a parallelogram.



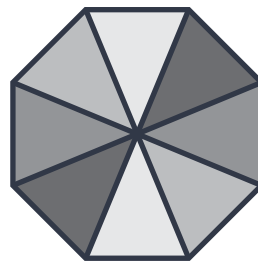
Program Evo to draw...



an irregular octagon.



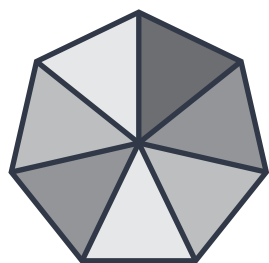
Program Evo to draw...



a regular octagon using triangles.



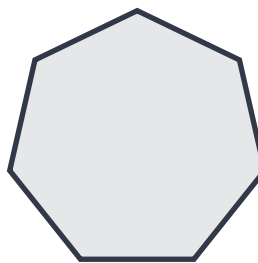
Program Evo to draw...



a regular heptagon using triangles.



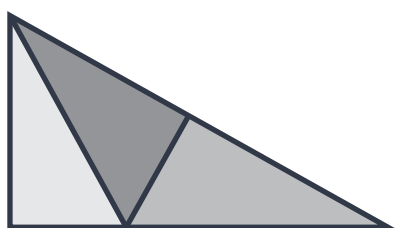
Program Evo to draw...



a regular heptagon.



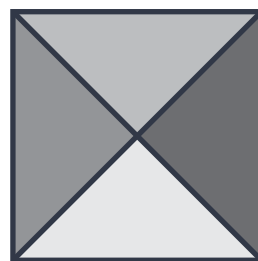
Program Evo to draw...



a triangle using three other triangles.



Program Evo to draw...



a square using four triangles.

