

POLYGON PATTERNS

Go to four different stations and collect data about different polygons and their exterior angles. In the tables below, write the name of each polygon type and answer the corresponding questions.

Math Data

Polygon Type: _____		
How many exterior angles are there?	What shape do all the exterior angles combine to make?	What is the angle measure of that shape?

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Reflection and Conclusions

- 1) Based on what you saw at the four stations, what do you think the definition of an *exterior angle* is?

- 2) For any polygon, what is the connection between the number of sides it has and the number of exterior angles it has?

- 3) What is the relationship between corresponding interior and exterior angles?

- 4) What is the relationship between the number of sides a polygon has and the sum of its exterior angles? How does this differ from the sum of the interior angles of a polygon?