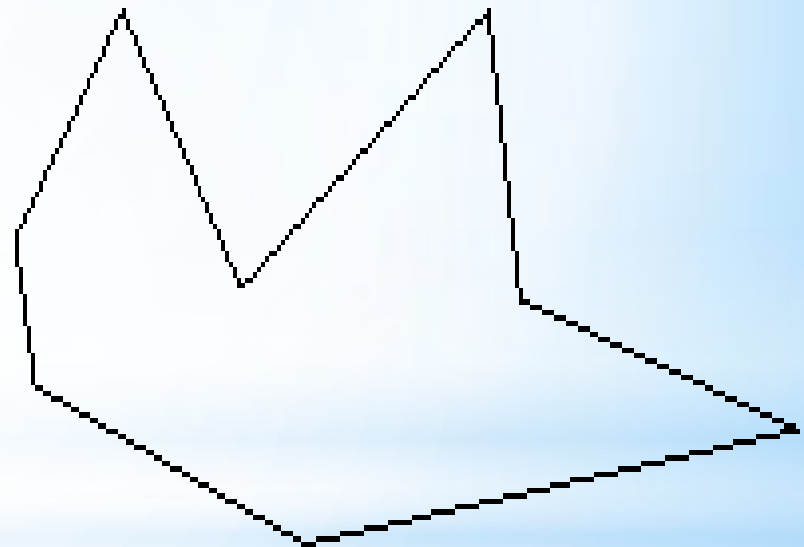
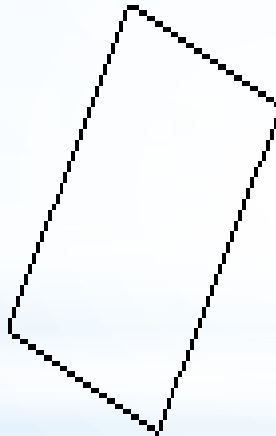
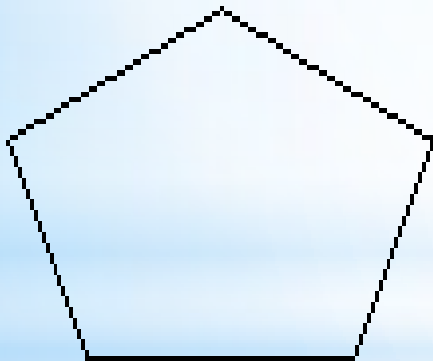


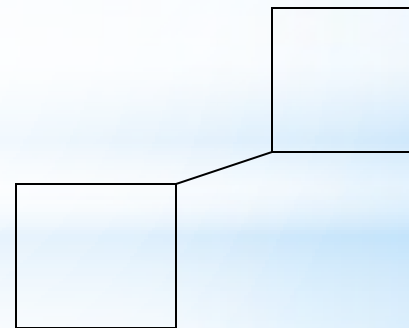
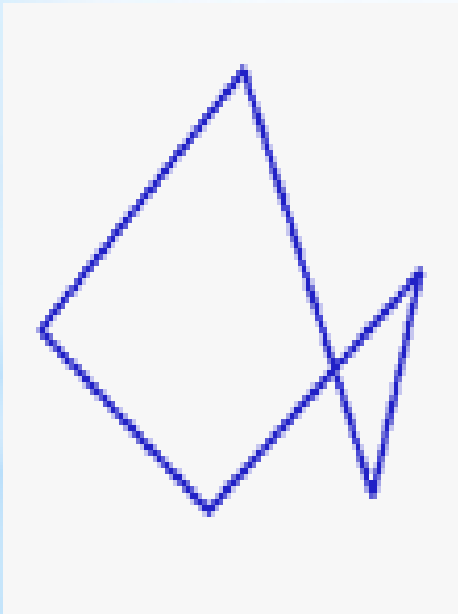
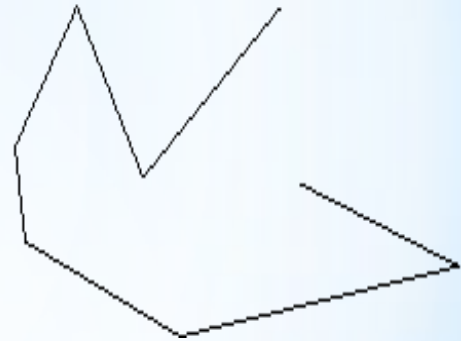
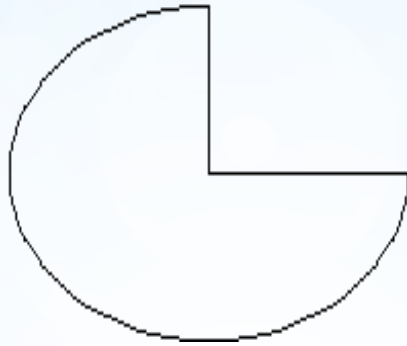
The background features a light blue gradient with a series of concentric circles centered in the upper half. A small yellow dot is at the center of these circles. The word "Polygons" is written in a bold, dark blue font, with a faint reflection of the text appearing below it.

Polygons

Are these figures polygons? Why?



Are these figures polygons? Why?



two-dimensional object

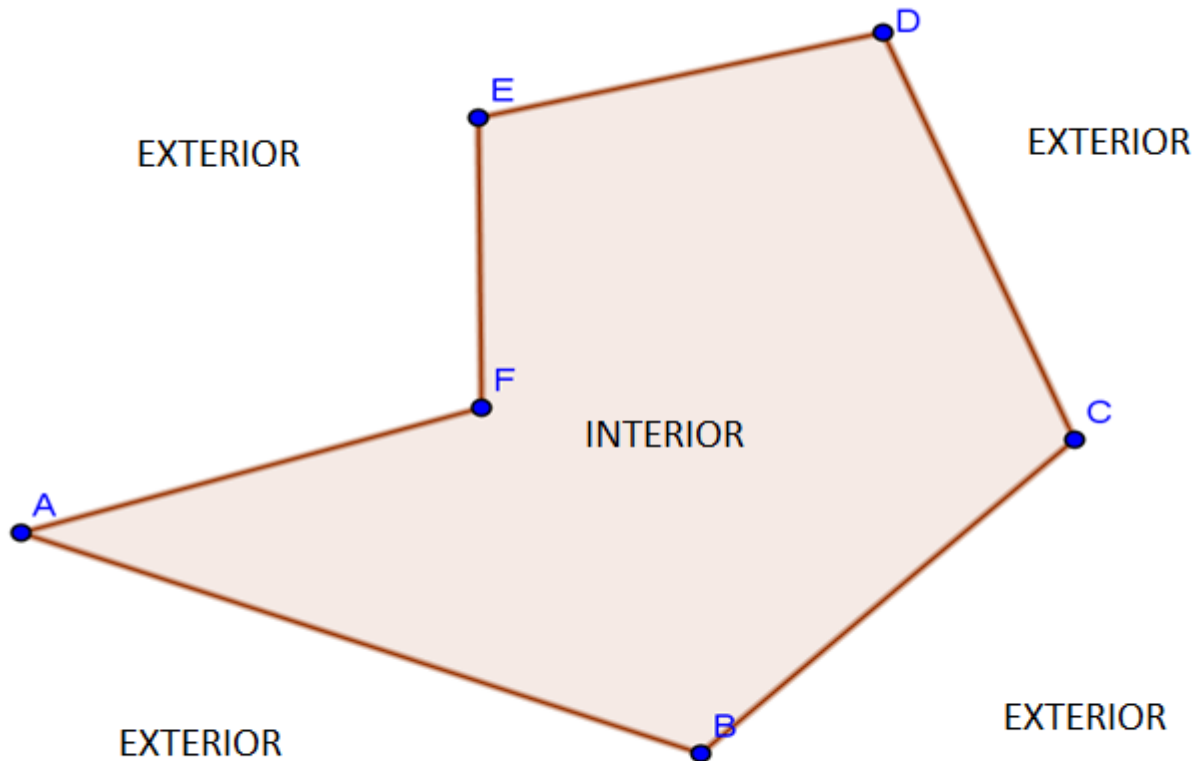
```
graph TD; A[two-dimensional object] --> B[Polygon]; B --> C[finite chain of closed, straight line]; B --> D[no self-intersecting];
```

Polygon

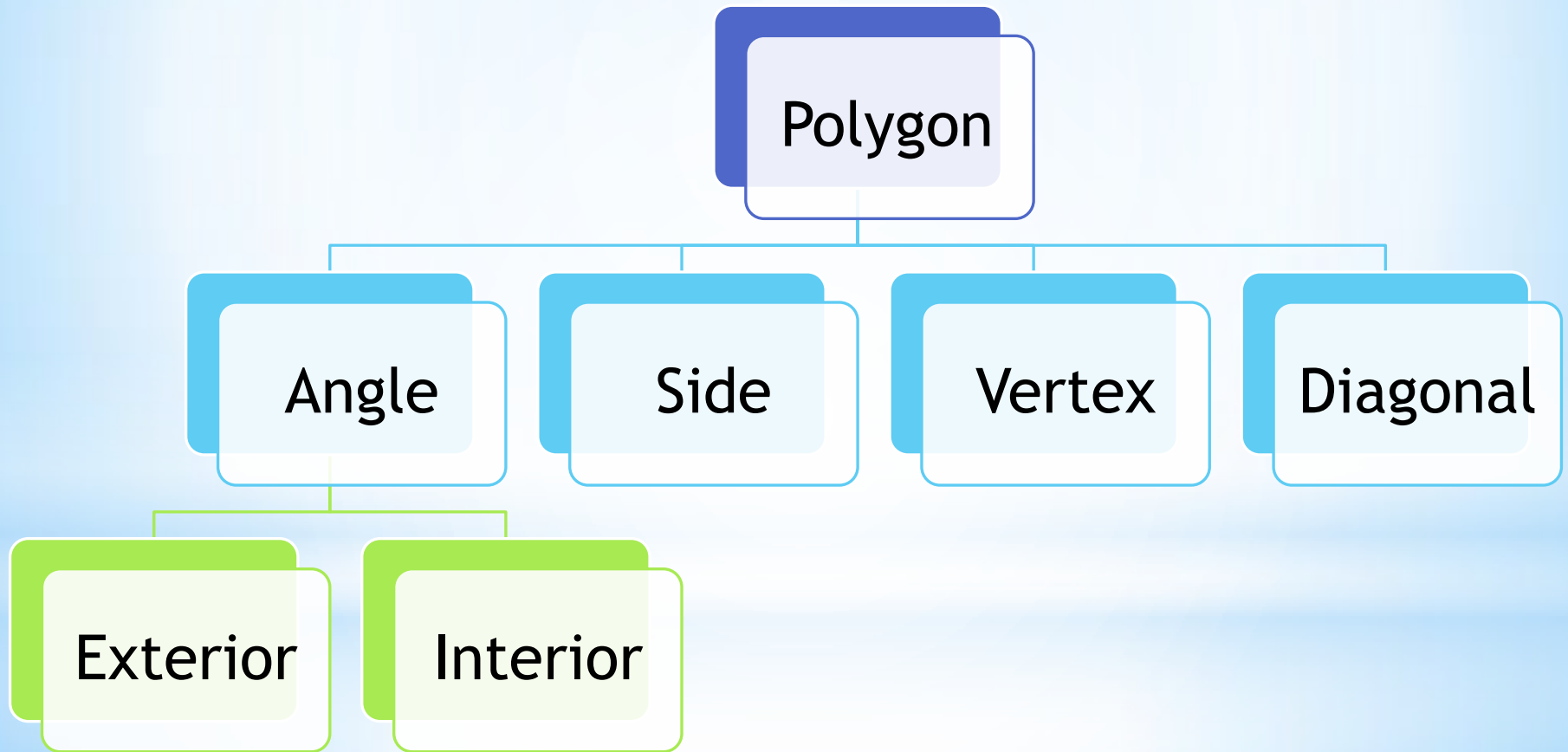
finite chain of
closed, straight line

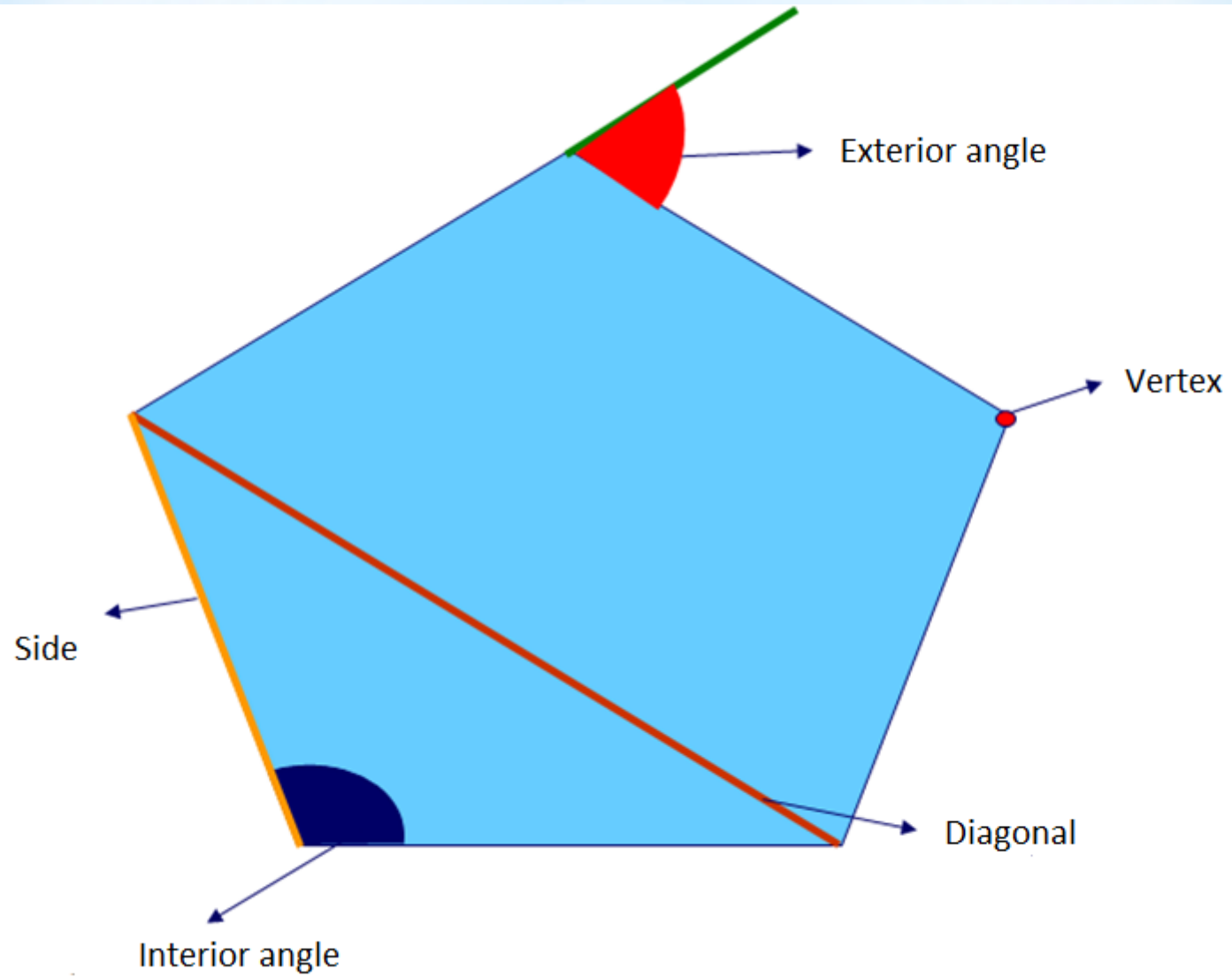
no self-
intersecting

Interior and exterior of a polygon.

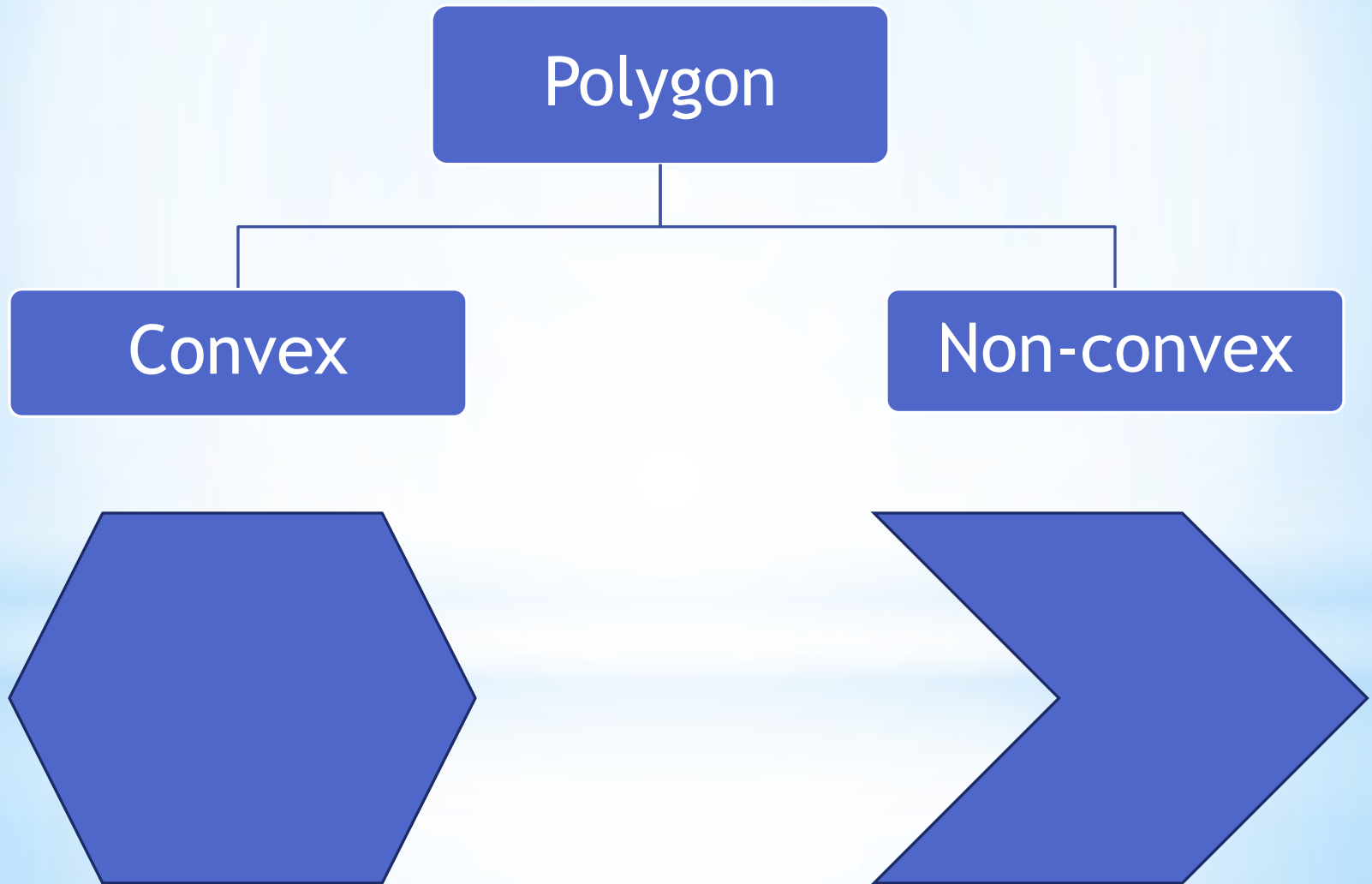


Parts of polygon

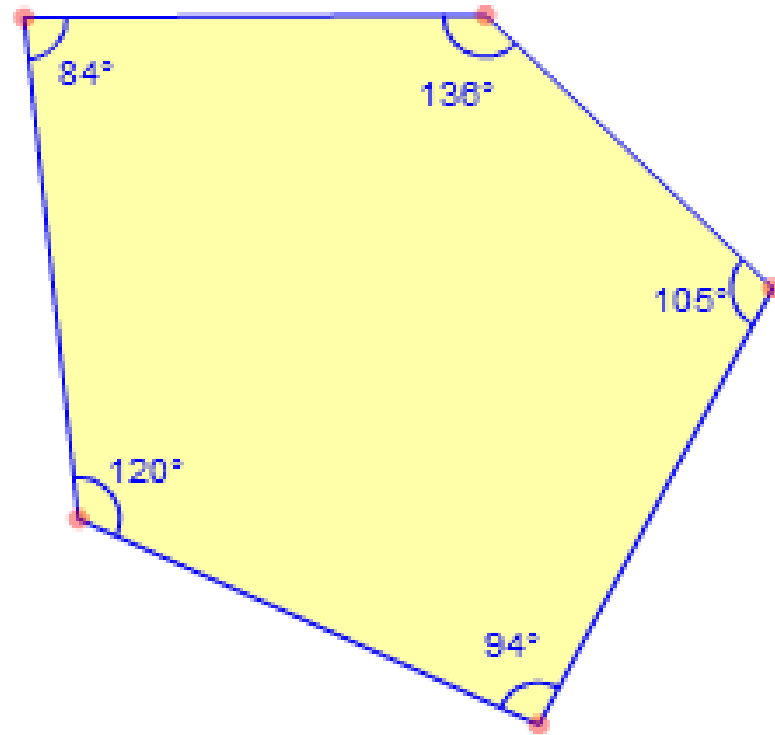


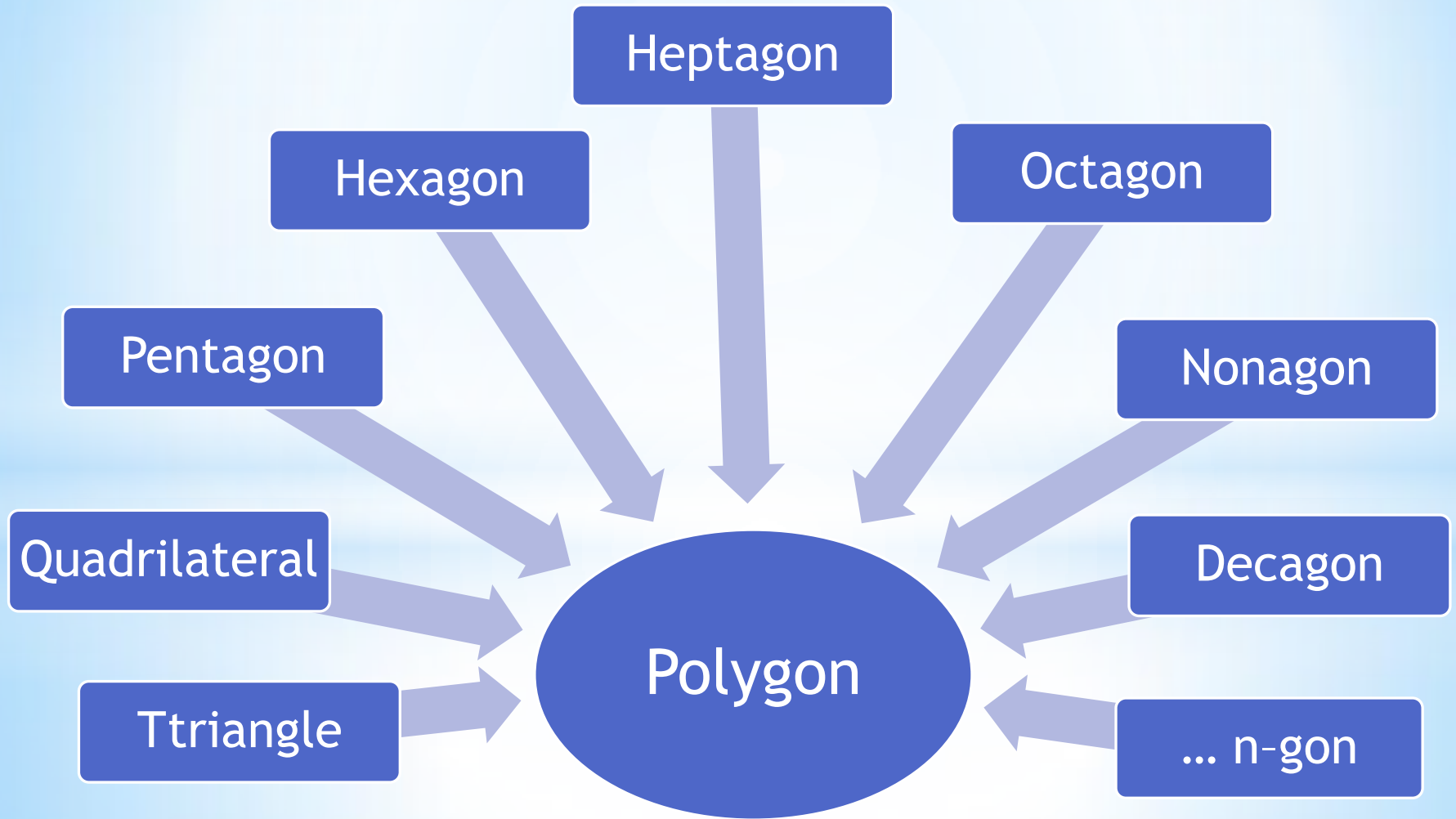


Types of polygon



A convex polygon is defined as a polygon with all its interior angles less than 180° .





3
vertexes

Triangle

3 angles

3 sides

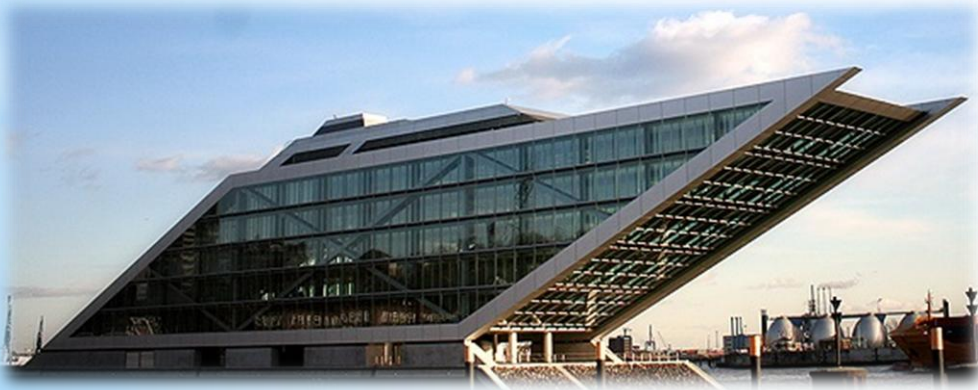
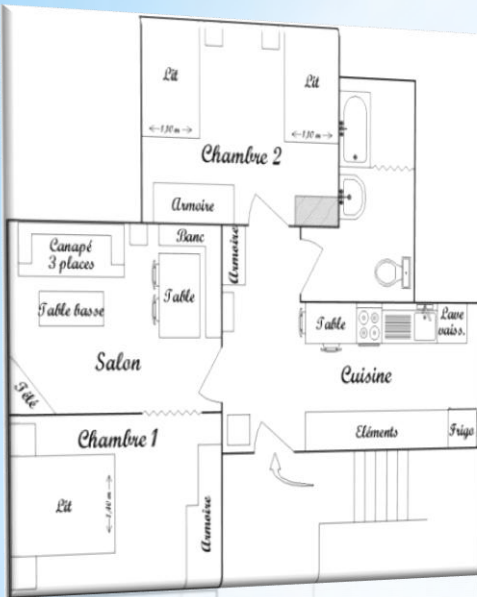


4 vertexes

Quadrilateral

4 angles

4 sides



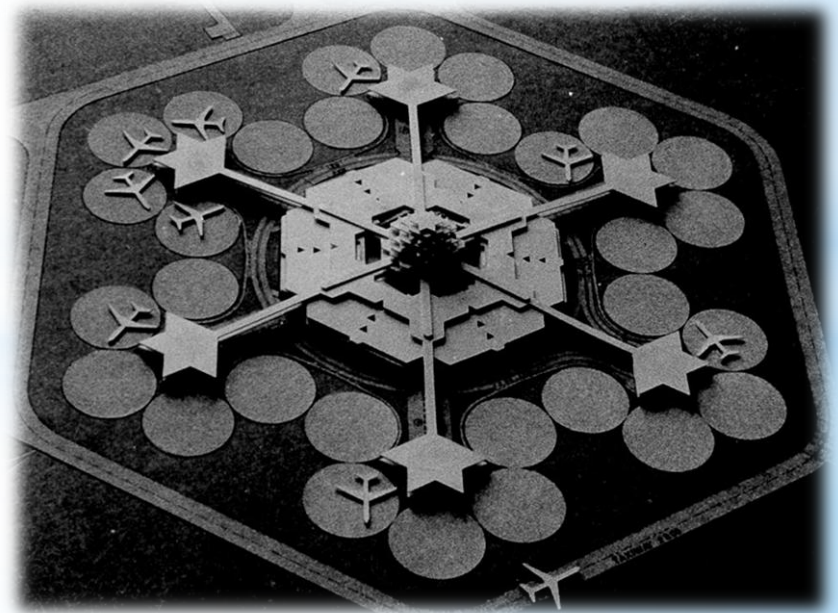


Hexagon

6 angles

6 sides

6
vertexes



Heptagon



Octagon





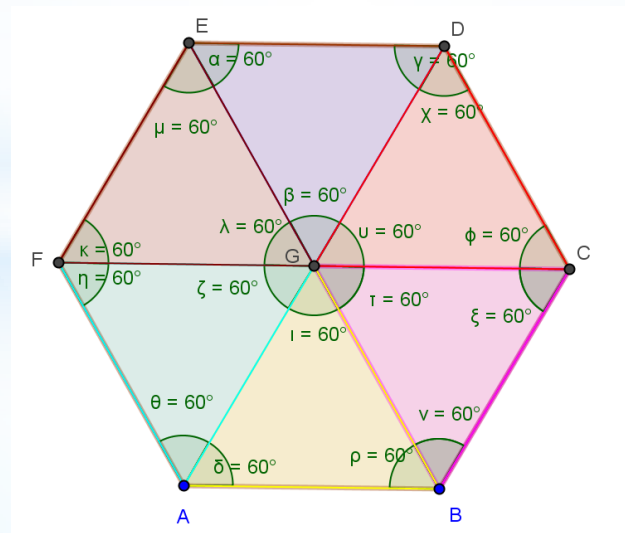
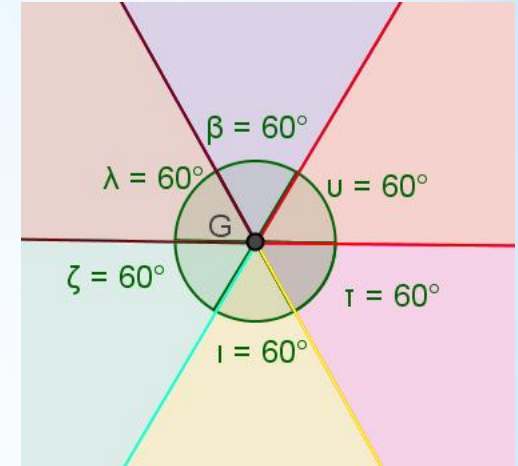
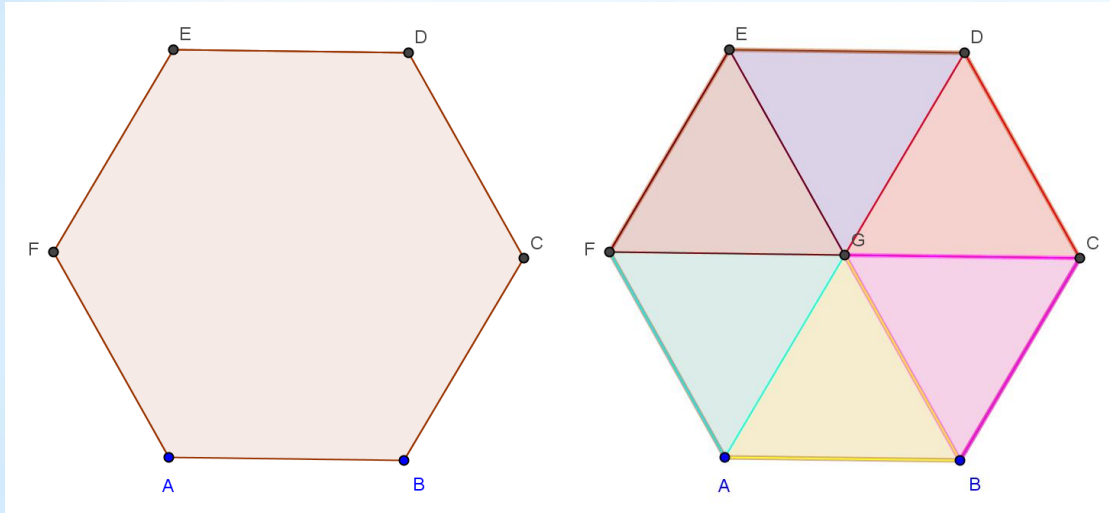
Decagon



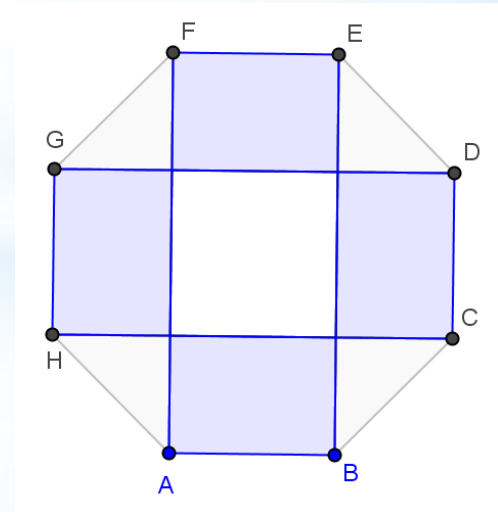
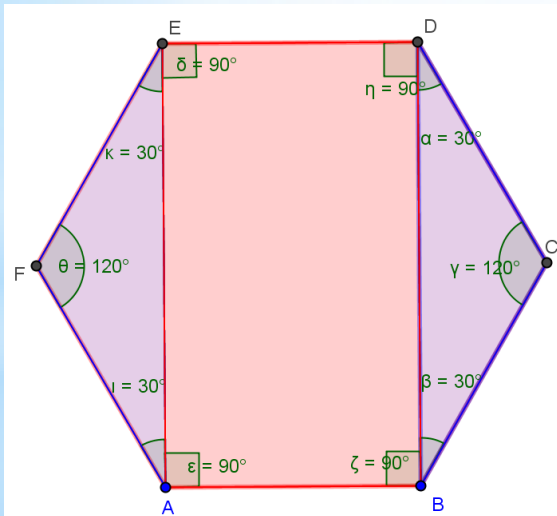
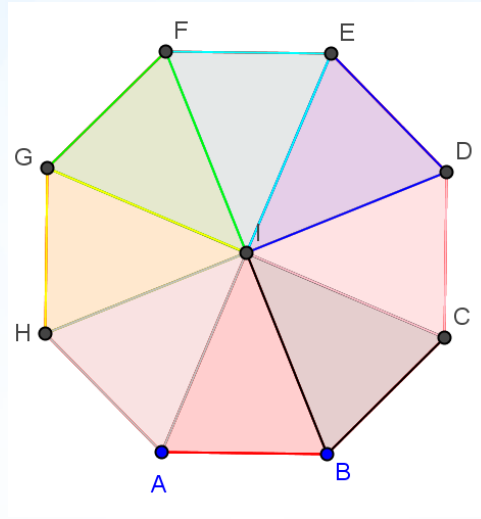
What is
n-gon?



Dividing polygon(example: hexagon)

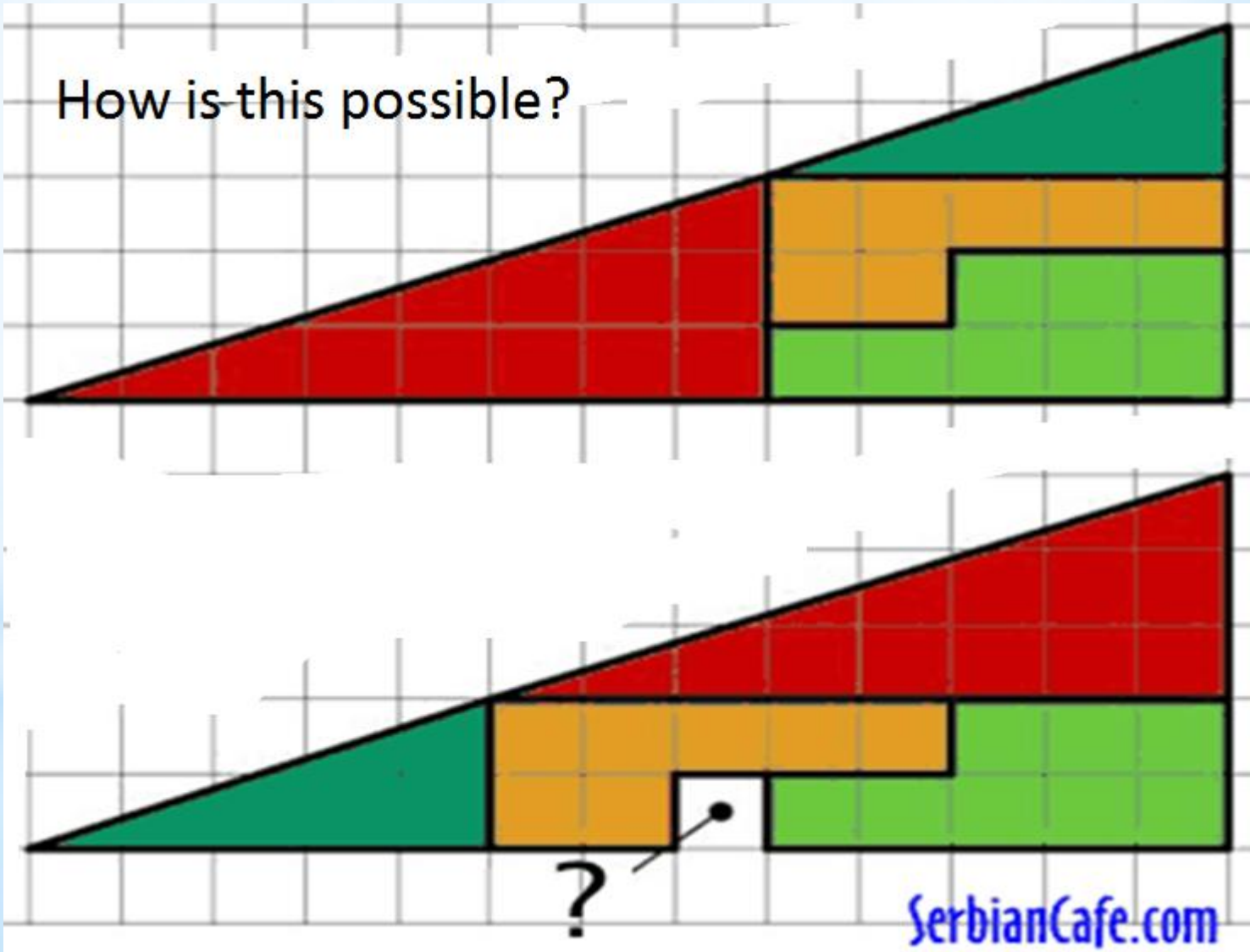


Other way to divide figures:



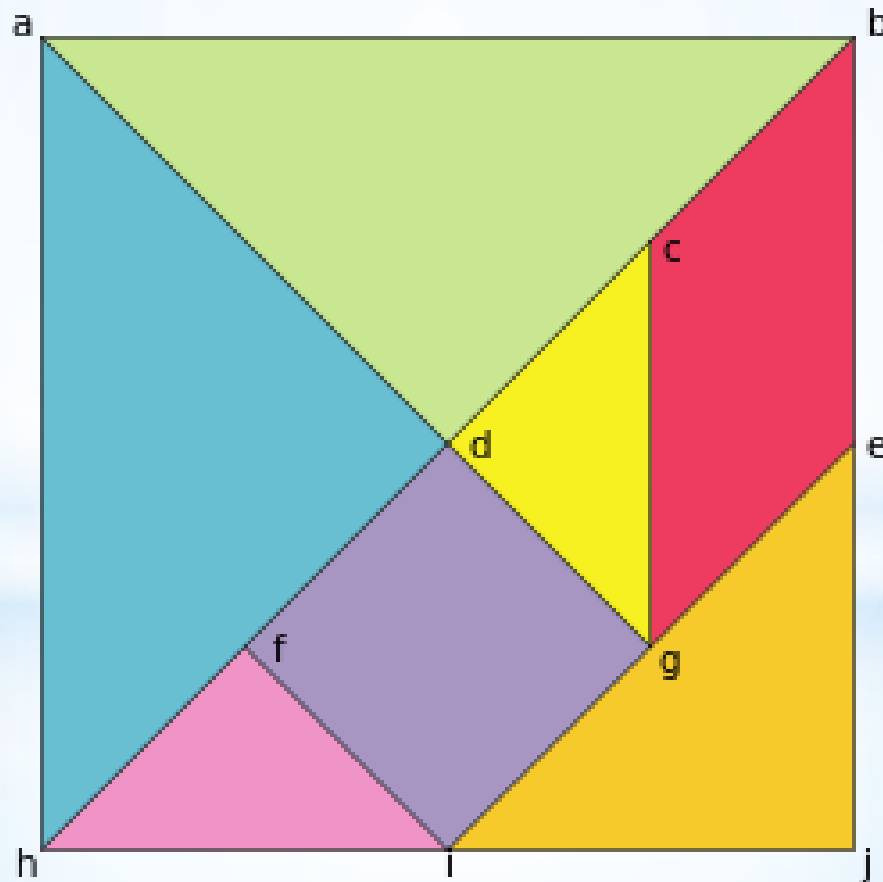
???

How is this possible?



Tangram

The **tangrams** a dissection puzzle consisting of seven flat shapes, called *tans*, which are put together to form shapes.



What can you make with tans:



Mosaic

Mosaic is the art of creating images with an assemblage of small pieces of colored glass, stone, or other materials.



Some other mosaics:

