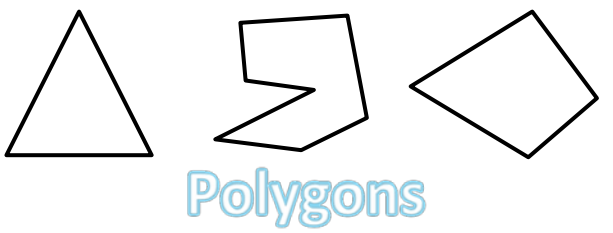
INTRODUCTION TO POLYGONS *ANSWERS*

THIS HANDOUT IS DESIGNED TO BE USED WITH THE INTRODUCTION TO POLYGONS VIDEO.

WORDS YOU SHOULD KNOW.

Line Segment	Quadrilateral	Vertex	Obtuse Angle	Point	Angle
Transformation	Right Angle	Tangram	Acute Angle	Triangle	Polygon

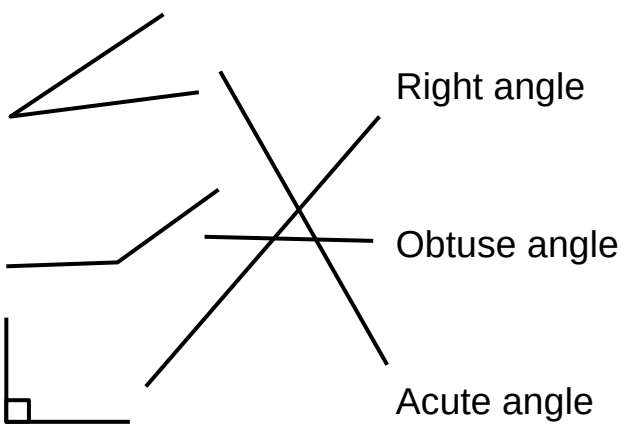
A ***polygon*** is a closed two dimensional (flat) figure that has at least three sides. A polygon with all angles equal and all sides equal is called a ***regular polygon***.



FILL IN THE BLANKS.

1. ***TANGRAM*** is a Chinese game that uses two dimensional shapes called ***POLYGONS***.
2. There is one ***POINT*** (dot) at each end of a ***LINE SEGMENT***.
3. An ***ANGLE*** is created at the ***VERTEX***, which tells us the amount of rotation that separates two lines.
4. Translation, Rotation, and Reflection are all types of ***TRANSFORMATION***.

DRAW A LINE TO THE CORRECT NAME OF EACH ANGLE.



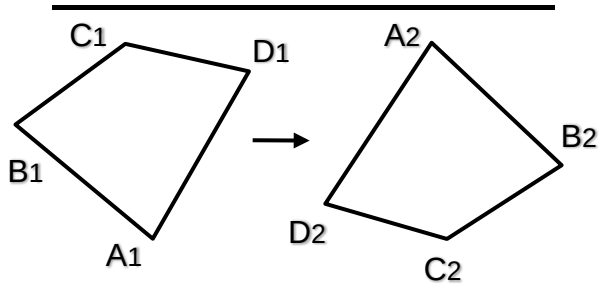
Triangles can be categorized by their sides and by their angles. There are three types of each.

Sides:
1. Scalene Triangle - All the sides are different lengths.
2. Isosceles Triangle - Two sides are the same length.
3. Equilateral Triangle - All sides are equal in length.

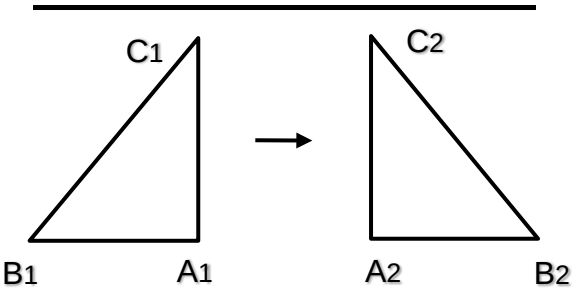
Angles:
1. Acute Triangle - All angles are less the 90 degrees.
2. Obtuse Triangle - One angle is greater than 90 degrees.
3. Right Triangle - One angle is equal to 90 degrees.

NAME THE TRANSFORMATION FOR EACH POLYGON BELOW.

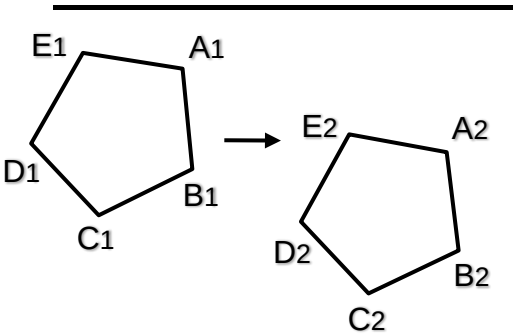
8. ***ROTATION***



9. ***REFLECTION***



10. ***TRANSLATION***



FILL IN THE BLANKS

11. A hexagon has ***6*** sides. 12. If you add the three interior angles of a triangle they will equal ***180*** degrees. 13. A nonagon has ***9*** sides. 14. An eight sided shape is called an ***OCTOGON***. 15. A quadrilateral has ***4*** sides. 16. And its four angles total ***360°***