

INTRODUCTION TO POLYGONS

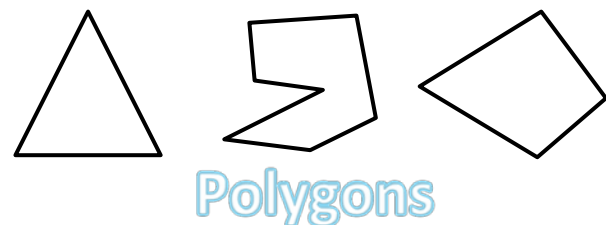
NAME: _____

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


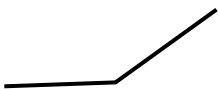

A **polygon** is a closed two dimensional (flat) figure that has at least three sides. A polygon with all angles equal and all sides equal is called a **regular polygon**.



FILL IN THE BLANKS.

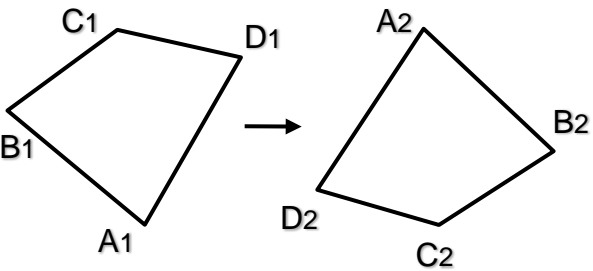
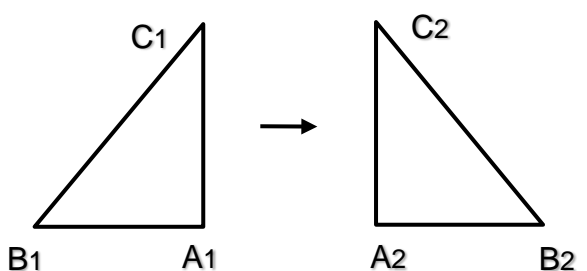
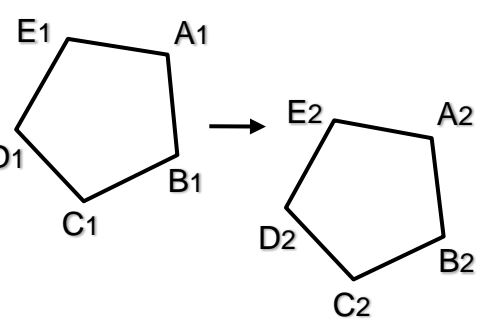
- _____ is a Chinese game that uses two dimensional shapes called _____.
- There is one _____ (dot) at each end of a _____.
- An _____ is created at the _____, which tells us the amount of rotation that separates two lines.
- Translation, Rotation, and Reflection are all types of _____.

DRAW A LINE TO THE CORRECT NAME OF EACH ANGLE.

-  Right angle
-  Obtuse angle
-  Acute 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 than 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.

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FILL IN THE BLANKS

- A hexagon has _____ sides.
- If you add the three interior angles of a triangle they will equal _____ degrees.
- A nonagon has _____ sides.
- An eight sided shape is called an _____.
- A quadrilateral has _____ sides.
- And its four angles total _____°.