

# Geometry

Chapter 1  
Section 1-8A

# Vocabulary

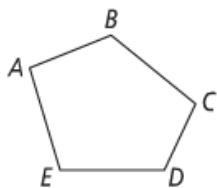
**Polygon**     Single plane figure that is closed and has three or more sides

**Diagonal**     Segment that connects two nonconsecutive vertices

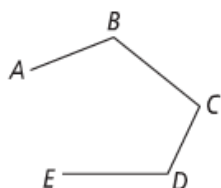
**Convex Polygon**     Polygon with no diagonals on the outside of the figure

**Concave Polygon**     Polygon with at least one diagonal outside the figure

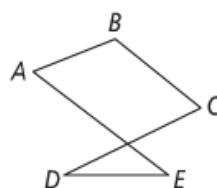
# Polygon Examples



A polygon



Not a polygon;  
not a closed figure



Not a polygon;  
two sides intersect  
between endpoints.

# Naming Polygons

Names of Common Polygons

Sides	Name	Sides	Name
3	Triangle, or trigon	9	Nonagon, or enneagon
4	Quadrilateral, or tetragon	10	Decagon
5	Pentagon	11	Hendecagon
6	Hexagon	12	Dodecagon
7	Heptagon	:	:
8	Octagon	$n$	$n$ -gon

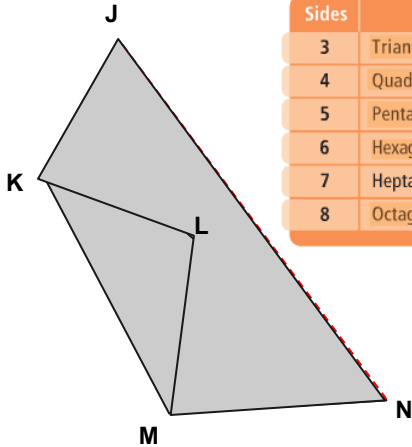


Figure shows a Pentagon  
Figure is concave  
Figure can be named: JKMLN  
*\*\*Not JKLMN*