

POLYGONS

Definition: A **polygon** is a closed plane figure made up of 3 or more line segments.

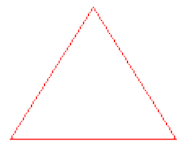
Polygons are named according to the number of sides.

For example, a polygon with three sides is called a **triangle**.

A polygon with four sides is called a **quadrilateral**.

A polygon with five sides is called a **pentagon**.

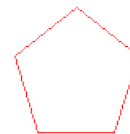
Examples: The names of the most common polygons are given below:



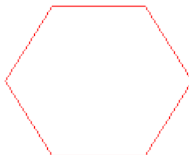
Triangle - 3 sides



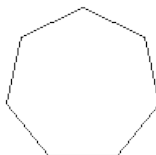
Quadrilateral - 4 sides



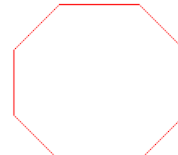
Pentagon - 5 sides



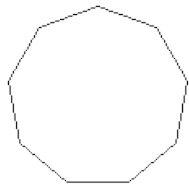
Hexagon - 6 sides



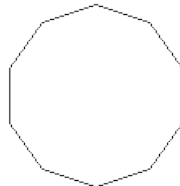
Heptagon - 7 sides



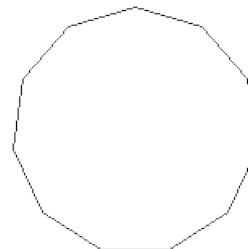
Octagon - 8 sides



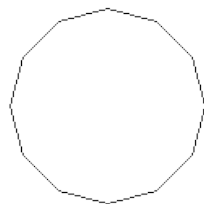
Nonagon - 9 sides



Decagon - 10 sides



Undecagon - 11 sides



Dodecagon - 12 sides

Exercise: Identify the set that shows the polygons arranged in the decreasing order of number of sides.

Choices:

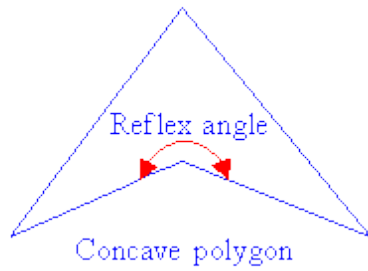
- A. Octagon, hexagon, pentagon, and quadrilateral
- B. Pentagon, hexagon, octagon, and quadrilateral
- C. Quadrilateral, pentagon, hexagon, and octagon
- D. Hexagon, pentagon, quadrilateral, and octagon

Your answer :

Concave Polygon

If a polygon has a reflex angle, then it is said to be a **concave polygon**.

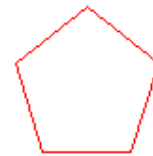
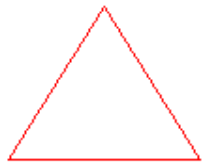
Example:



Convex Polygon

If a polygon has no reflex angle, then it is said to be a **convex polygon**.

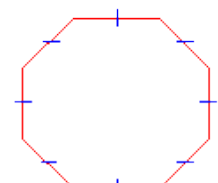
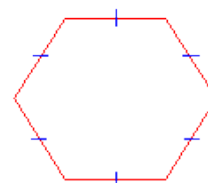
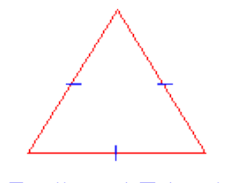
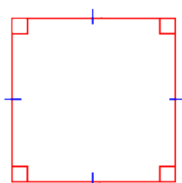
Examples :



Regular Polygon

A **regular polygon**'s sides are all of the same length and its angles are the same size.

Examples:



Irregular Polygon

If a polygon is not a regular polygon, then it is said to be an **irregular polygon**.

Example :

