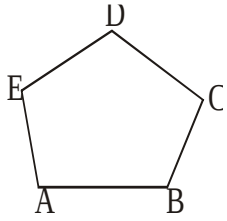
UNDERSTANDING QUADRILATERALS

CONVEX AND CONCAVE POLYGON

Convex and Concave Polygons

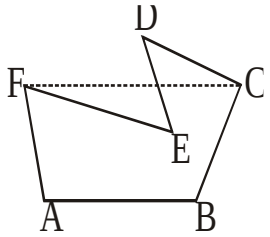
A polygon in which measure of each angle is less then 180°, is called a convex polygon.

In the figure, ABCDE is a convex polygon.



A polygon in which atleast on angle is greater then 180° is called a concave polygon.

In the figure, ABCDEF is a concave polygon.

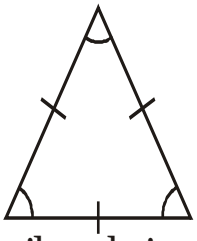


We also observe that in a convex polygon no portions of its diagonals lie in its exteriors. However, in a concave polygon some portion of altest one diagonal lies in its exterior.

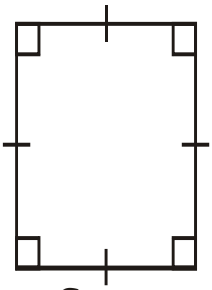
Regular and Irregular Polygons

A polygon having all sides equal and all angles equal is called a regular polygon. For example, a square is a regular polygon, because it has sides of equal measure and angles of equal measure. A rhombus has sides of equal length but its angles are not equal. Hence, it is not a regular polygon.

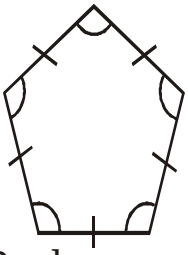
Following polygon are regular :



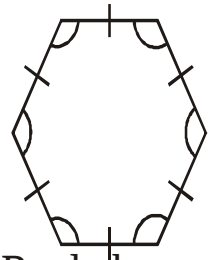
Equilateral triangle



Square



Regular pentagon



Regular hexagon