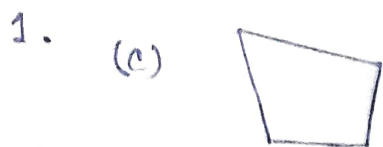


Ex - 51



2. A quadrilateral has 4 angles, 2 diagonals, 4 sides and 4 vertices.

3. (a) In a quadrilateral, ABCD,
 $\angle A = 120^\circ$, $\angle B = 60^\circ$ and $\angle C = 90^\circ$
 $\therefore \angle D = 360^\circ - (120^\circ + 60^\circ + 90^\circ) = 90^\circ$

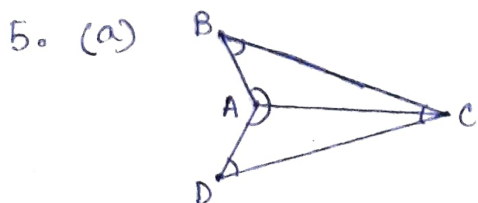
(b) In a quadrilateral ABCD,
 $\angle B = \angle C = \angle D = 90^\circ$
 $\angle A = 360^\circ - (90^\circ + 90^\circ + 90^\circ) = 90^\circ$

4. (a) The unknown angle measures, $360^\circ - (100^\circ + 80^\circ + 70^\circ)$
 $= 360^\circ - 250^\circ$
 $= 110^\circ$

(b) The unknown angle measures, $360^\circ - (130^\circ + 70^\circ + 60^\circ)$
 $= 100^\circ$

(c) The unknown angle measures, $360^\circ - (110^\circ + 120^\circ + 70^\circ)$
 $= 60^\circ$

(d) The unknown angle measures, $360^\circ - (90^\circ + 90^\circ + 50^\circ)$
 $= 130^\circ$

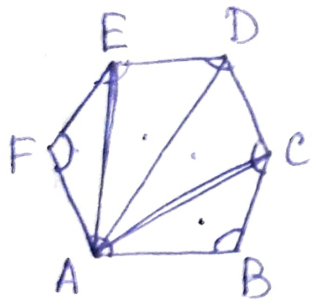


The triangles formed are ABC, ACD.

Thus the figure is divided in 2 triangles.

\therefore The sum of the angles $= 2 \times 180^\circ = 360^\circ$

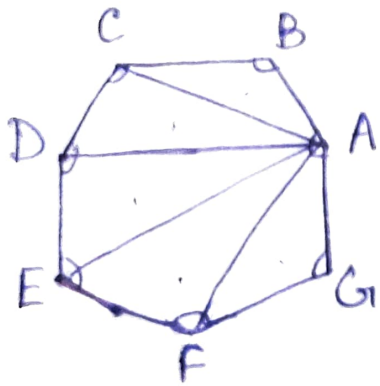
5. (b)



∴ The triangles formed are ABC, ACD, ADE, AEF.
Thus the figure is divided into 4 triangles.

∴ The sum of the angles = $4 \times 180^\circ = 720^\circ$

(c)



The triangles formed are ABC, ACD, ADE, AEF, AFG

Thus the figure is divided into 5 triangles.

∴ The sum of the angles = $5 \times 180^\circ = 900^\circ$