

Hw

1. (i)  $20^\circ, 70^\circ, 90^\circ \Rightarrow$  ~~NO~~ YES (AS Sum =  $180^\circ$ )

(ii)  $40^\circ, 130^\circ, 20^\circ \Rightarrow$  NO (AS Sum =  $190^\circ$ )

(iii)  $60^\circ, 60^\circ, 50^\circ \Rightarrow$  NO (AS Sum =  $170^\circ$ )

(iv)  $125^\circ, 40^\circ, 15^\circ \Rightarrow$  YES (AS Sum =  $180^\circ$ )

2. All the angles of a triangle =  $180^\circ$

Number of angles in a  $\Delta$  = 3

Degree of each angle =  ~~$180^\circ$~~  <sup>$60^\circ$</sup>

$\therefore$  The degree of each angle is  $60^\circ$ . ( $60^\circ + 60^\circ + 60^\circ = 180^\circ$ )

3.  $\angle A = 45^\circ$   $\angle A + \angle B + \angle C = 180^\circ$

$\angle B = 75^\circ$   ~~$= 180^\circ$~~

$= 45^\circ + 75^\circ + \angle C = 180^\circ$

$= 120^\circ + \angle C = 180^\circ$

$= \angle C = 180^\circ - 120^\circ = 60^\circ$

$\therefore \angle C = 60^\circ$