HW

150. Q 1, 2, 3

1. (i) 20°, 70° and 90°

A- Sum of 20° 70° and 90°

$= 20° + 70° + 90° = 180°$

Hence is possible

(ii) 40°, 130° and 20°

A- Sum of 40° 130° and 20°

$= 40° + 130° + 20°$

$= 190°$

Hence it is not possible

(iii) 60°, 60° and 50°

A- Sum of 60° 60° and 50°

$= 60° + 60° + 50°$

$= 170$

Hence it is not possible

(iv) 125°, 40° and 15°

A- Sum of 125° 40° and 15°

$= 125° + 40° + 15°$

$= 180°$

Hence it is possible.

2. If the angles of a triangles are equal find its angle.

A. Since the three angles of a triangles are equal and their sum is 180°, therefore each angle will be $\frac{180°}{3} = 60°$.

3. In a triangle ABC, $\angle A = 45°$ and $\angle B = 75°$, Find $\angle C$.

A. Since the sum of angles of a triangle is 180°

$\therefore \angle A + \angle B + \angle C = 180°$

$\Rightarrow 45° + 75° + \angle C = 180°$

$\Rightarrow 120° + \angle C = 180°$

$\Rightarrow \angle C = 180° - 120°$

$\Rightarrow \angle C = 60°$