## **Congruency of Triangles: Worksheet -5**

1. Which of the following pairs of triangles are congruent?

(i) 
$$\triangle ABC$$
, AB = 10 cm,  
 $\angle A = 40^{\circ}$ ,  $\angle B = 55^{\circ}$ ;  $\triangle XYZ$ ,  $XY = 10cm$ ,  $\angle Y = 40^{\circ}$ ,  $\angle Z = 85^{\circ}$ 

(ii) 
$$\triangle PQR$$
, PR = 5 cm,  
 $\angle P = 37^{\circ}$ ,  $\angle R = 64^{\circ}$ ;  $\triangle DEF$ ,  $DE = 5cm$ ,  $\angle D = 37^{\circ}$ ,  $\angle F = 64^{\circ}$ 

2. In the adjoining figure  $\triangle ABC$  is isosceles as  $\overline{AB} = \overline{AC}$ .  $\overline{BA}$  and  $\overline{CA}$  are produced to  $\overline{Q}$  and  $\overline{P}$  such that  $\overline{AQ} = \overline{AP}$ . show that  $\overline{PB} = \overline{QC}$ .



