Congruency of Triangles: Worksheet -7

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

    i) $\triangle$ ABC : AB = 4cm, BC = 5 cm, $\angle$B = 72⁰

    $\triangle$ PQR : QR = 4 cm, RP = 5 cm, $\angle$R = 72⁰

    ii) $\triangle$ ABC : AB = 4cm, BC = 5 cm, $\angle$B = 72⁰

    $\triangle$ PQR : PQ = 4 cm, RP = 5 cm, $\angle$R = 72⁰

    iii) $\triangle$ ABC : BC = 6cm, $\angle A$ =90⁰, $\angle C$ = 50⁰

    $\triangle$ PQR : QR = 6 cm, $\angle R$ =50⁰, $\angle Q$ = 40⁰

    iv) $\triangle$ ABC : AB = 5cm, BC = 7 cm, CA = 8.5 cm

    $\triangle$ PQR : PQ = 7cm, QR= 5 cm, RP = 8.5 cm

v) $\triangle$ ABC : $\angle$ A= 90^0, BC = 8 cm, AB = 5 cm

   $\triangle$ PQR : $\angle$ P = 90^0, QR= 8cm, PR=5cm

vi) $\triangle$ ABC and $\triangle$ ADC in which AB=AD and BC=CD

vii) $\triangle$ ABC and $\triangle$ ABD in which AC=AD and $\angle ABC = \angle ADB = 90^0$

viii) $\triangle$ ABC and $\triangle$ PQR in which BC = QR, $\angle A = 90^0$, $\angle B = \angle Q = 65^0$

   and $\angle R = 25^0$