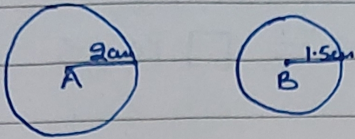


Exercise :- 7.1.

1) Identify the pairs of congruent figures and write the congruence in symbolic form.

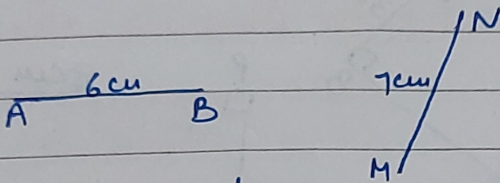
(i)



Not congruent.

\therefore size is not same.

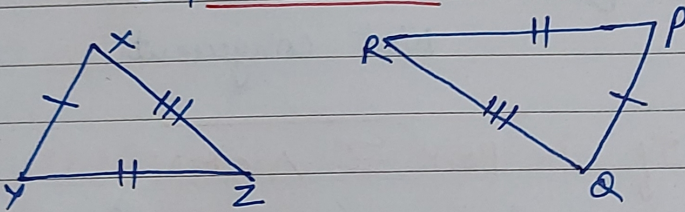
(ii)



Not congruent.

\therefore $AB \neq MN$.

(iii)



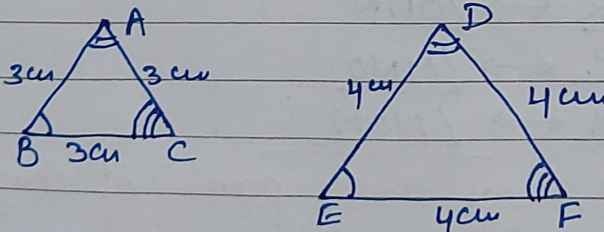
$$XY = PQ$$

$$YZ = PR$$

$$XZ = RQ$$

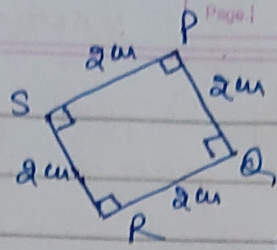
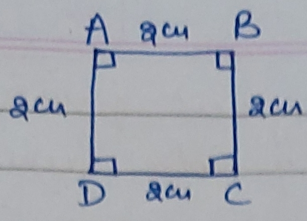
$$\therefore \triangle XYZ \cong \triangle QPR$$

(iv)



Not congruent.

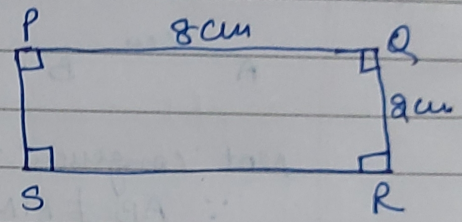
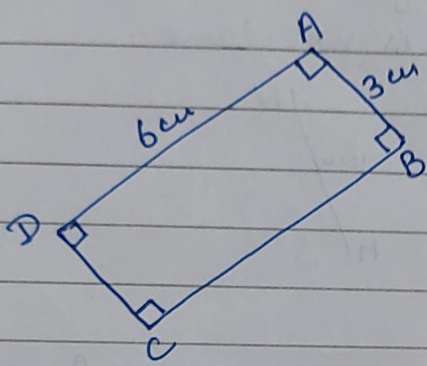
(v)



$\square ABCD \cong \square PQRS$

All the sides and angles are same

(vi)



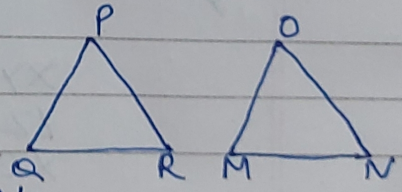
Not congruent.

② If $\triangle PQR \cong \triangle OMN$

vertices: $P \leftrightarrow O, Q \leftrightarrow M, R \leftrightarrow N$

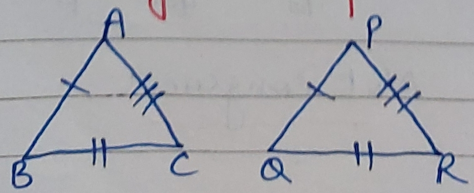
Sides: $PQ \leftrightarrow OM, QR \leftrightarrow MN, RP \leftrightarrow NO$

Angles: $\angle PQR \leftrightarrow \angle OMN, \angle QRP \leftrightarrow \angle MNO, \angle RQP \leftrightarrow \angle NOM$



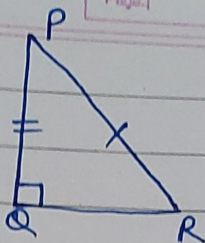
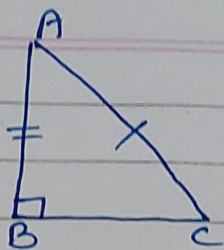
③ Draw any two pairs of congruent triangles

(i)



$\triangle ABC \cong \triangle PQR$

(ii)



$$\triangle ABC \cong \triangle PQR.$$

(4)

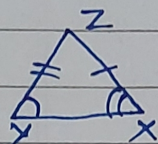
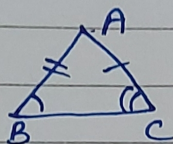
If $\triangle ABC \cong \triangle ZYX$ write the parts of ZYX that correspond to:

(i) $\angle B = \angle Y$

(ii) $CA = XZ$

(iii) $AB = ZY$

(iv) $\angle C = \angle X$



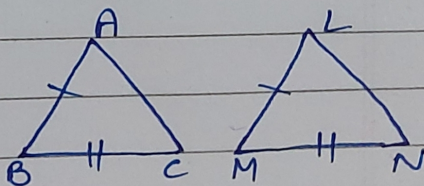
(5) Multiple choice questions:

(i) if $\triangle ABC \cong \triangle XYZ$

(c) $\angle A = \angle X$

(ii) Two line segments are congruent if

(d) They are of equal length.

(iii) Two triangles $\triangle ABC$ and $\triangle LMN$ are congruentIf $AC = 5\text{cm}$ then $LN = 5\text{cm}$ 

(6) Two right angles are always congruent.

True

(7) Two opposite sides of a rectangle are always congruent.

True.