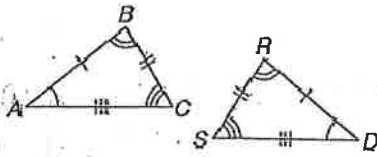


# Introduction to Congruent Triangles Homework | 2011

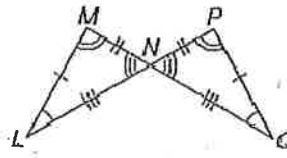
Identify the congruent triangles in each figure.

1.



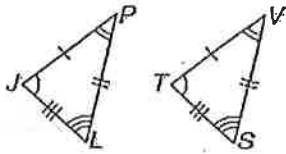
$$\triangle ABC \cong \triangle DRS$$

2.



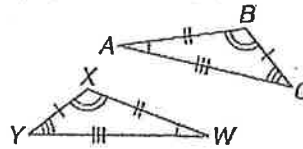
$$\triangle LMN \cong \triangle QPN$$

1.



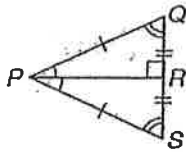
$$\triangle LJP \cong \triangle STV$$

2.



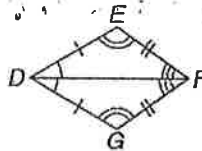
$$\triangle ABC \cong \triangle WXY$$

3.



$$\triangle PQR \cong \triangle PSR$$

4.



$$\triangle DEF \cong \triangle DGF$$

Name the congruent angles and sides for each pair of congruent triangles.

5.  $\triangle ABC \cong \triangle FGH$

$\angle A \cong \angle F$

$\overline{AB} \cong \overline{FG}$

$\angle B \cong \angle G$

$\overline{BC} \cong \overline{GH}$

$\angle C \cong \angle H$

$\overline{AC} \cong \overline{FH}$

6.  $\triangle PQR \cong \triangle STU$

$\angle P \cong \angle S$

$\overline{PQ} \cong \overline{ST}$

$\angle Q \cong \angle T$

$\overline{QR} \cong \overline{TU}$

$\angle R \cong \angle U$

$\overline{PR} \cong \overline{SU}$

3.  $\triangle GKP \cong \triangle LMN$

$\angle G \cong \angle L, \angle K \cong \angle M, \angle P \cong \angle N$

4.  $\triangle ANC \cong \triangle RBV$   
 $\overline{GN} \cong \overline{RB}, \overline{KN} \cong \overline{BV}, \overline{CP} \cong \overline{RV}$

$\angle A \cong \angle R$

$\overline{AN} \cong \overline{RB}$

$\angle N \cong \angle B$

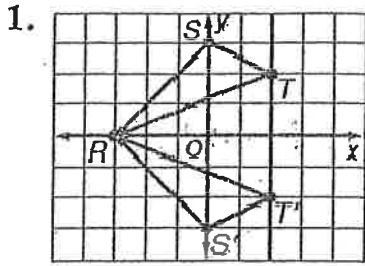
$\overline{NC} \cong \overline{BV}$

$\angle C \cong \angle V$

$\overline{AC} \cong \overline{RV}$

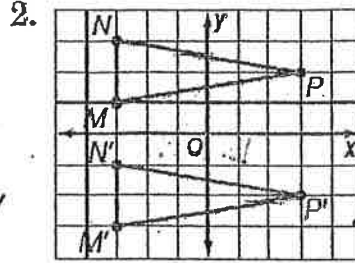
# Introduction to Congruent Triangles Homework | 2011

Determine whether each transformation is a reflection, rotation, or translation. Then, identify the congruent triangles in each figure.



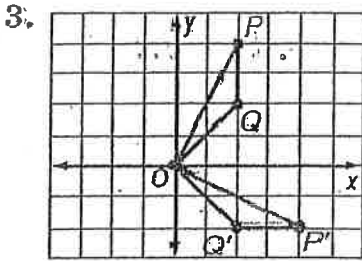
Reflect across x axis

$$\triangle RST \cong \triangle RS'T'$$



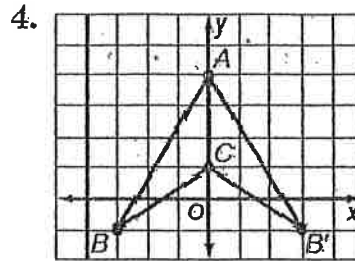
$(x, y-4)$   
Translation

$$\triangle MNP \cong \triangle M'N'P'$$

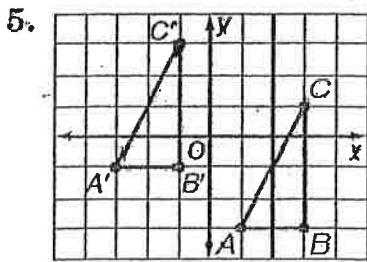


Rotate  $90^\circ$   
 $\triangle OPQ \cong \triangle OP'Q'$

$$(x, y) \rightarrow (y, -x)$$

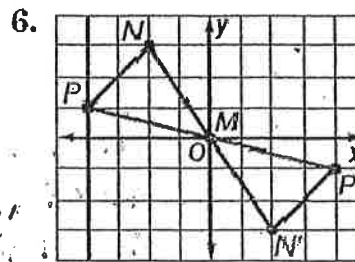


Reflect over y axis  
 $\triangle ABC \cong \triangle A'B'C'$



Translate  
 $(x+3, y+2)$

$$\triangle ABC \cong \triangle A'B'C'$$



Rotate  $180^\circ$   
 $\triangle OPN \cong \triangle OP'N'$