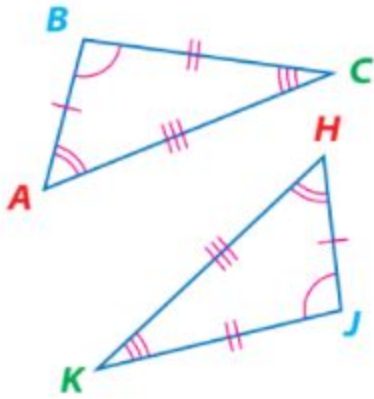


Congruent:

Congruent Polygon:

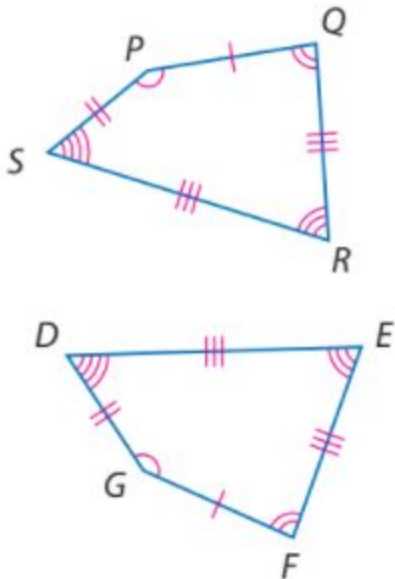
If and only if

Congruence Statement:

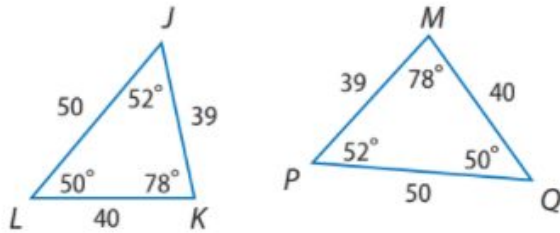


1. Identify all the congruent parts of the polygons below and write a congruence statement:

a.

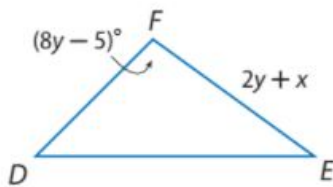
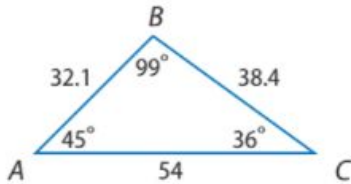


b.

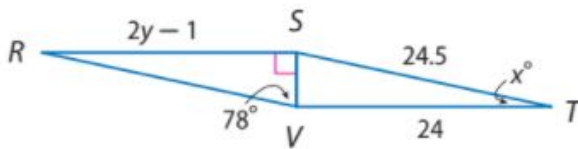


Using CPCTC:

2. In the diagram $\triangle ABC \cong \triangle DFE$. Find the values of x and y



3. In the diagram $\triangle RVS \cong \triangle TVS$. Find the values of x and y



Third Angles Theorem	If two angles of one triangle are congruent to two angles in a second triangle then the third angles of the triangles are congruent	
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Theorem 4.4 Properties of Triangle Congruence

Reflexive Property of Triangle Congruence
 $\triangle ABC \cong \triangle ABC$

Symmetric Property of Triangle Congruence
 If $\triangle ABC \cong \triangle EFG$, then $\triangle EFG \cong \triangle ABC$.

Transitive Property of Triangle Congruence
 If $\triangle ABC \cong \triangle EFG$ and $\triangle EFG \cong \triangle JKL$, then $\triangle ABC \cong \triangle JKL$.

4. Write a two column proof for:

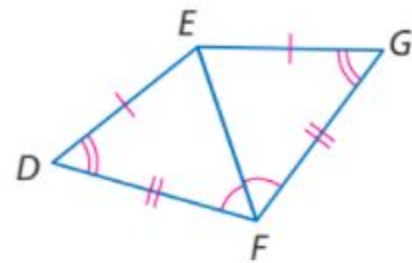
Given:

$$\overline{DE} \cong \overline{GE}$$

$$\overline{DF} \cong \overline{GF}$$

$$\angle D \cong \angle G$$

$$\angle DFE \cong \angle GFE$$



Prove: $\triangle DEF \cong \triangle GEF$

Statements	Reasons
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.

Geometry CP
4.3 Congruent Triangles

5. Write a two column proof for:

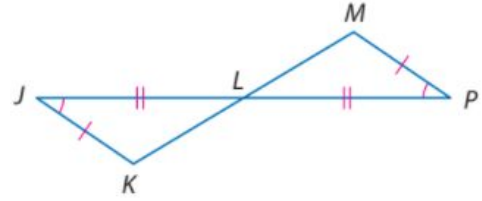
Given:

$$\overline{JL} \cong \overline{PL}$$

$$\overline{JK} \cong \overline{PM}$$

$$\angle J \cong \angle P$$

L bisects \overline{KM}



Prove: $\triangle JKL \cong \triangle PML$

Statements	Reasons
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.

6. Provide a two column proof for:

