

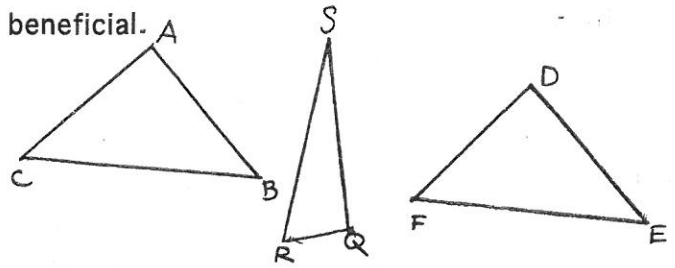
≅ Δ WS #2

4.4-5 Rev WS #2

Name: _____

For problems #1-8, the diagrams at right will be beneficial.

1. For $\triangle ABC$ name the included angle of \overline{AC} and \overline{BC} .
2. For $\triangle ABC$ name the two sides which include $\angle CAB$.
3. For $\triangle QRS$ name a non-included side of $\angle R$ and $\angle Q$.
4. For $\triangle QRS$ start at $\angle RQS$, going clockwise around triangle name the next consecutive angle, side and side.



5 - 8, state a third congruence you could be given to prove $\triangle ABC \cong \triangle DEF$ using the indicated method (a sketch of triangles will help).

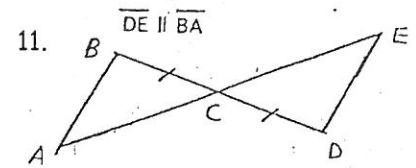
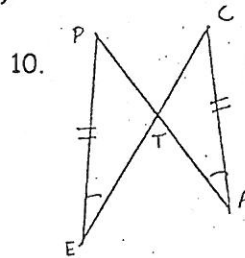
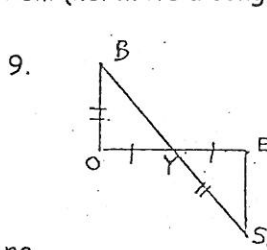
5. $\angle A = \angle D$
 $\angle B = \angle E$
 Method: ASA

6. $\angle A = \angle D$
 $\overline{BC} = \overline{EF}$
 Method: AAS

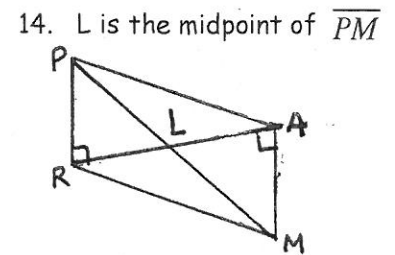
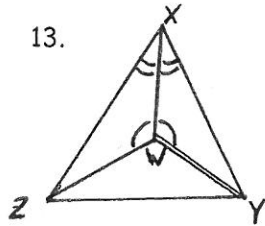
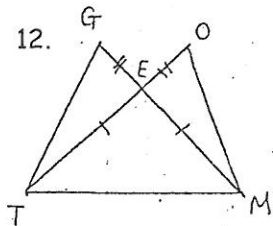
7. $\angle A = \angle D$
 $\overline{AC} = \overline{DF}$
 Method: ASA

8. $\angle C = \angle F$
 $\overline{EF} = \overline{BC}$
 Method: SAS

#9-14, Can you prove the two triangles are congruent? Why or why not? If the triangles are congruent, then name them (i.e. write a congruence statement).

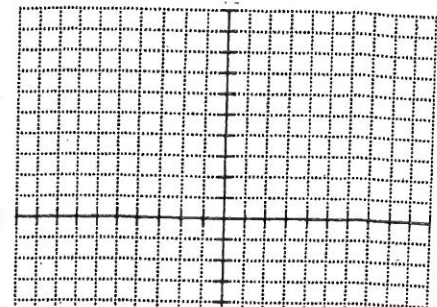


yes or no
 reason:
 \cong statement



15. Use the given set of points and the graph at right to determine whether or not $\triangle EFG \cong \triangle JKL$. Explain your reasoning.

E (-3,3), F (-1,3), G (-2,0), J(0,-1), K(2,-1), L(1,2)



#17-21, Write a

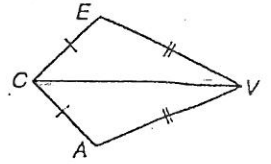
two-column proof for the following problems

17.

Given: $\overline{EC} \cong \overline{AC}$
 $\overline{VE} \cong \overline{VA}$

Prove: $\triangle CEV \cong \triangle CAV$

17.

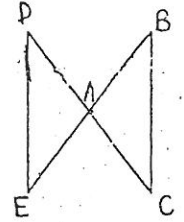


18.

Given: A is the midpoint of \overline{CD} & \overline{BE}

Prove: $\triangle DAE \cong \triangle CAB$

18.

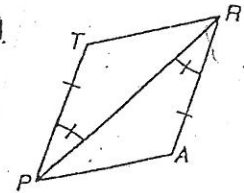


19.

Given: $\overline{PT} \cong \overline{RA}$
 $\angle R \cong \angle P$

Prove: $\triangle TRP \cong \triangle APR$

19.

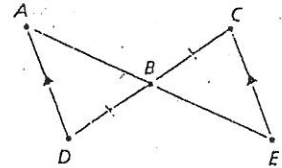


20.

Given: $\overline{AD} \parallel \overline{CE}$
 $\overline{BD} \cong \overline{BC}$

Prove: $\triangle ABD \cong \triangle EBC$

20.



21.

Given: $\overline{AB} \perp \overline{AD}$, $\overline{DE} \perp \overline{AD}$
 C is the midpoint of \overline{BE}

Prove: $\triangle ABC \cong \triangle DEC$

21.

