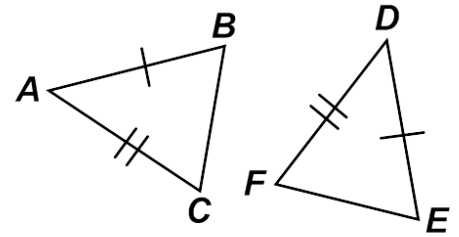


GEOMETRY - HW#63
Sections 4.1C – 4.1D Review

Name _____

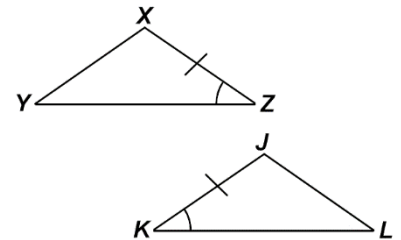
1. Which additional congruence statement is needed to prove $\triangle ABC \cong \triangle DEF$?

- A. $\angle B \cong \angle E$; SAS Congruence Postulate
- B. $\overline{BC} \cong \overline{EF}$; SSS Congruence Postulate
- C. $\angle A \cong \angle D$; SAS Congruence Postulate
- D. A or B
- E. B or C



2. Which additional congruence statement is needed to prove $\triangle XYZ \cong \triangle JKL$?

- A. $\angle Y \cong \angle K$; SAS Congruence Postulate
- B. $\overline{XY} \cong \overline{JK}$; SAS Congruence Postulate
- C. $\overline{ZY} \cong \overline{LK}$; SAS Congruence Postulate
- D. A or B
- E. B or C



3. In rectangle $ABCD$, a diagonal is drawn from B to D . Which statement is not true? (Hint: draw a picture).

- A. $\angle DAB \cong \angle BCD$
- B. $\angle ABD \cong \angle CDB$
- C. $\overline{AB} \cong \overline{BC}$
- D. $\overline{DB} \cong \overline{DB}$
- E. $\angle ADB \cong \angle CBD$

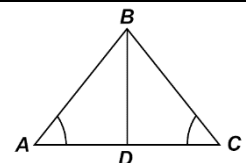
4. In $\triangle MNO$ and $\triangle XYZ$, $\overline{MN} \cong \overline{XY}$ and $\overline{NO} \cong \overline{YZ}$. If the triangles are congruent, what else must be true?

- A. $\angle N \cong \angle Y$
- B. $\angle M \cong \angle Z$
- C. $\overline{MO} \cong \overline{XZ}$
- D. A and C
- E. All of the above.

5. You are given the following information about $\triangle GHI$ and $\triangle EFD$. Which set of statements would you need to prove $\triangle GHI \cong \triangle EFD$ by ASA?

- I. $\angle G \cong \angle E$ II. $\angle H \cong \angle F$ III. $\angle I \cong \angle D$ IV. $\overline{GH} \cong \overline{EF}$ V. $\overline{GI} \cong \overline{ED}$
- A. II, IV, V
 - B. II, III, V
 - C. I, III, V
 - D. I, IV, V
 - E. None of the above.

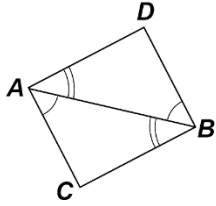
6. What is the third congruence needed to prove that $\triangle ABD \cong \triangle CBD$ by AAS?



7. Given that $\angle G \cong \angle E$ and $\angle I \cong \angle D$, what is the third congruence statement needed to prove that $\triangle GHI \cong \triangle EFD$ by AAS?

Determine whether the two triangles are congruent. If they are congruent, determine whether they are congruent by SSS, SAS, AAS, or ASA.

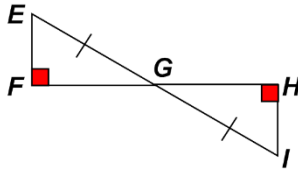
8. $\triangle ABC \cong \triangle BAD?$



Congruent Δ : YES or NO

Congruent how? _____

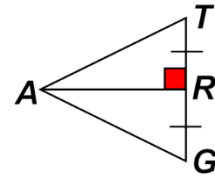
9. $\triangle EFG \cong \triangle IHG?$



Congruent Δ : YES or NO

Congruent how? _____

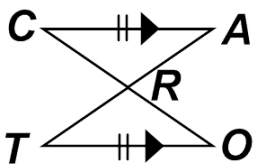
10. $\triangle TRA \cong \triangle GRA?$



Congruent Δ : YES or NO

Congruent how? _____

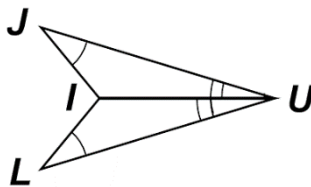
11. $\triangle ARC \cong \triangle TRO?$



Congruent Δ : YES or NO

Congruent how? _____

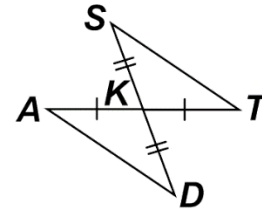
12. $\triangle JUI \cong \triangle LUI?$



Congruent Δ : YES or NO

Congruent how? _____

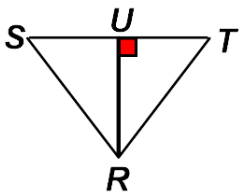
13. $\triangle DKA \cong \triangle SKT?$



Congruent Δ : YES or NO

Congruent how? _____

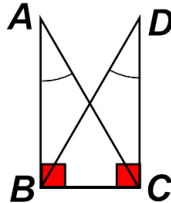
14. $\triangle SRT \cong \triangle URT?$



Congruent Δ : YES or NO

Congruent how? _____

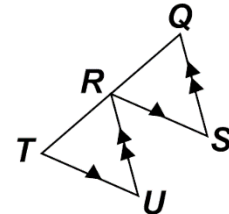
15. $\triangle ABC \cong \triangle DCB?$



Congruent Δ : YES or NO

Congruent how? _____

16. $\triangle QRS \cong \triangle RTU?$

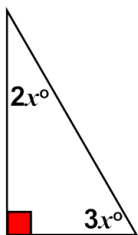


Congruent Δ : YES or NO

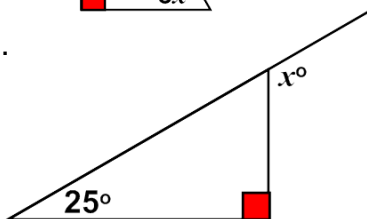
Congruent how? _____

Find the value of x .

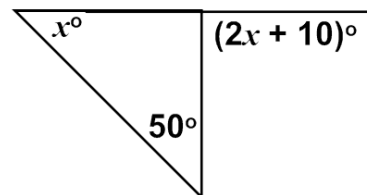
17.



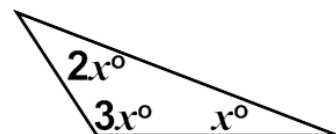
19.



18.

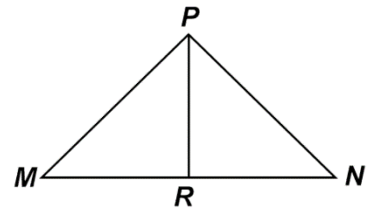


20.



21. Given: $\cdot R$ is the midpoint of \overline{MN}
 $\overline{PR} \perp \overline{MN}$

Prove: $\triangle MRP \cong \triangle NRP$

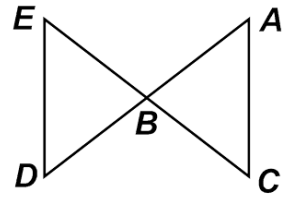


Statements

Reasons

22. Given: $\cdot B$ is the midpoint of \overline{AD}
 $\cdot B$ is the midpoint of \overline{CE}

Prove: $\triangle BED \cong \triangle BCA$

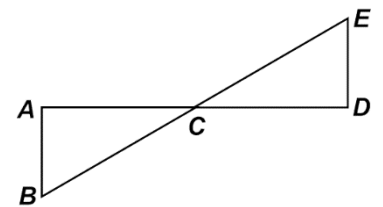


Statements

Reasons

23. Given: $\cdot C$ is the midpoint of \overline{BE}
 \overline{AB} and \overline{DE} are perpendicular to \overline{AD}

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

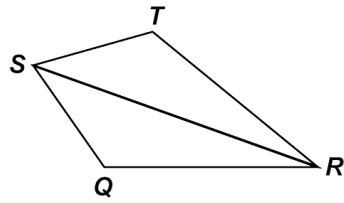


Statements

Reasons

24. Given: \overline{SR} bisects $\angle TSQ$
 $\angle T \cong \angle Q$

Prove: $\triangle RTS \cong \triangle RQS$

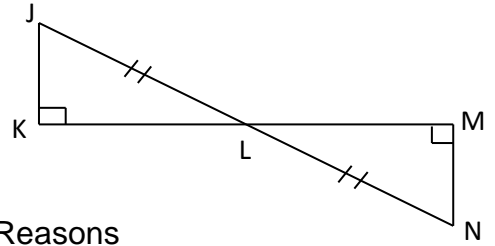


Statements

Reasons

25. Given: $\overline{JL} \cong \overline{NL}$
 $\angle K$ and $\angle M$ are right angles

Prove: $\triangle JLK \cong \triangle NLM$

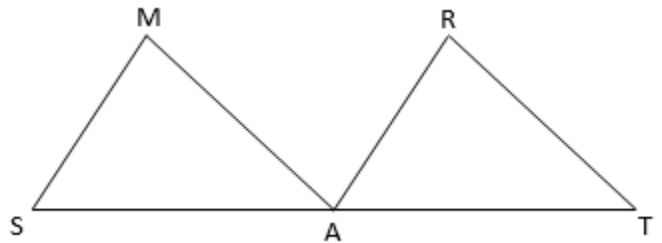


Statements

Reasons

26. Given: $\angle M \cong \angle R$
 $\overline{SM} \parallel \overline{AR}$
 A is the midpoint of \overline{ST}

Prove: $\triangle SMA \cong \triangle ART$



Statements

Reasons