Name _____ **Date** _____

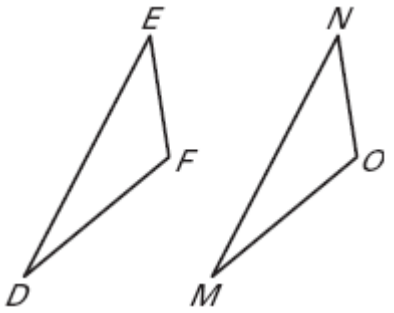
LESSION 4.5

Practice B

For use with pages 249–255

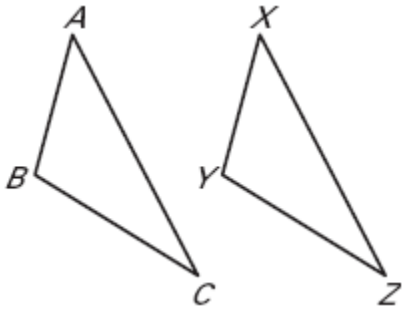
State the third congruence that is needed to prove that $\Delta DEF = \Delta MNO$ using the given postulate or theorem.

1. **GIVEN:** $\overline{DE} \cong \overline{MN}$, $\angle M \cong \angle D$, __?__ ≅ __?__ Use the SAS Congruence Postulate.
2. **GIVEN:** $\overline{FE} \cong \overline{ON}$, $\angle F \cong \angle O$, __?__ ≅ __?__ Use the AAS Congruence Theorem.
3. **GIVEN:** $\overline{DF} \cong \overline{MO}$, $\angle F \cong \angle O$, __?__ ≅ __?__ Use the ASA Congruence Postulate.



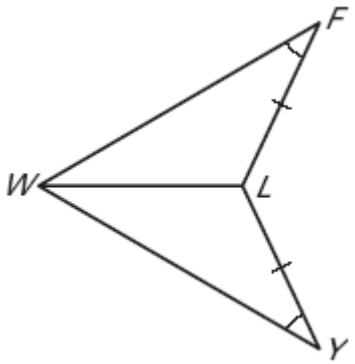
State the third congruence that is needed to prove that $\Delta ABC \cong \Delta XYZ$ using the given postulate or theorem.

4. **GIVEN**: $\angle A \cong \angle X$, $\angle B \cong \angle Y$, __?__ ≅ __?__ Use the AAS Congruence Theorem.
5. **GIVEN**: $\angle A \cong \angle X$, $\overline{AB} \cong \overline{XY}$, __?__ ≅ __?__ Use the ASA Congruence Postulate.
6. **GIVEN**: $\overline{BC} \cong \overline{YZ}$, $\angle C \cong \angle Z$, __?__ ≅ __?__ Use the SAS Congruence Theorem.



Is it possible to prove that the triangles are congruent? If so, state the postulate(s) or theorem(s) you would use.

7.



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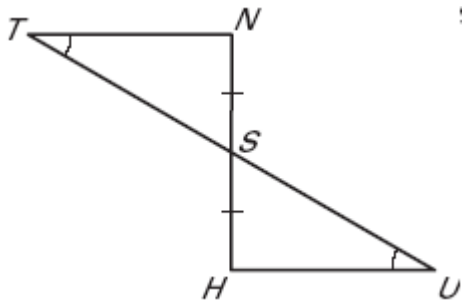


Tell whether you can use the given information to determine whether $\Delta JRM = \Delta XYZ$. Explain your reasoning.

9. $\overline{JM} \cong \overline{XZ}$, $\angle M \cong \angle Z$, $\angle R \cong \angle Y$

10. $\overline{JM} \cong \overline{XZ}$, $\overline{JR} \cong \overline{XY}$, $\angle J \cong \angle X$

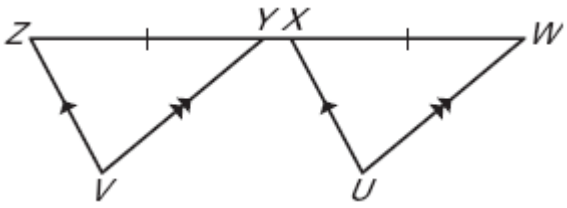
11. $\angle J \cong \angle X$, $\angle M \cong \angle Z$, $\angle R \cong \angle Y$

12. $\angle M \cong \angle Z$, $\angle R \cong \angle Y$, $\overline{JM} \cong \overline{XY}$

13. Proof Write a proof.

GIVEN: $\overline{WU} \parallel \overline{YV}$, $\overline{XU} \parallel \overline{ZV}$, $\overline{WX} \cong \overline{YZ}$

PROVE: $\Delta WXU \cong \Delta YZV$

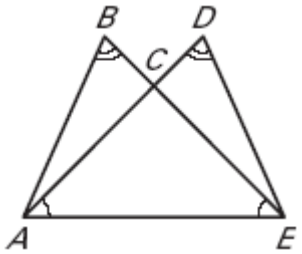


Statements	Reasons

14. Proof Write a proof.

GIVEN: $\angle B \cong \angle D$, $\angle DAE \cong \angle BEA$

PROVE: $\Delta ABC \cong \Delta EDC$



Statements	Reasons