

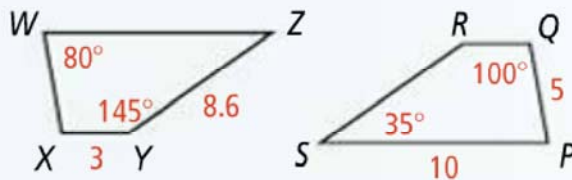
Homework: p.274-276: 5-30 all

Exercises

$RSTUV \cong KLMNO$. Complete the congruence statements.

5. $\overline{TS} \cong \underline{\quad?}$ 6. $\angle N \cong \underline{\quad?}$
 7. $\overline{LM} \cong \underline{\quad?}$ 8. $VUTSR \cong \underline{\quad?}$

$WXYZ \cong PQRS$. Find each measure or length.



9. $m\angle P$ 10. QR 11. WX
 12. $m\angle Z$ 13. $m\angle X$ 14. $m\angle R$

Exercises

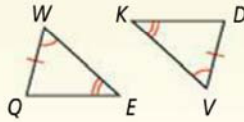
15. In $\triangle HFD$, what angle is included between \overline{DH} and \overline{DF} ?
 16. In $\triangle OMR$, what side is included between $\angle M$ and $\angle R$?

Which postulate or theorem, if any, could you use to prove the two triangles congruent? If there is not enough information to prove the triangles congruent, write *not enough information*.

17. 18.
19. 20.

Example

How can you use congruent triangles to prove $\angle Q \cong \angle D$?

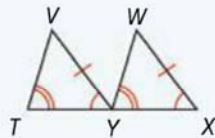


Since $\triangle QWE \cong \triangle DVK$ by AAS, you know that $\angle Q \cong \angle D$ because corresponding parts of congruent triangles are congruent.

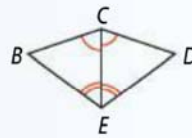
Exercises

How can you use congruent triangles to prove the statement true?

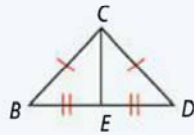
21. $\overline{TV} \cong \overline{YW}$



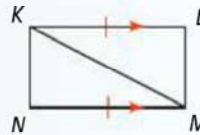
22. $\overline{BE} \cong \overline{DE}$



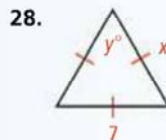
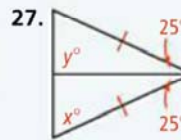
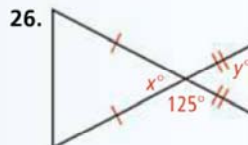
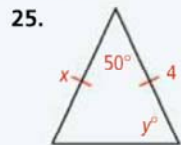
23. $\angle B \cong \angle D$



24. $\overline{KN} \cong \overline{ML}$



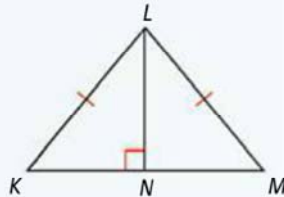
Algebra Find the values of x and y .



Write a proof for each of the following.

29. **Given:** $\overline{LN} \perp \overline{KM}$, $\overline{KL} \cong \overline{ML}$

Prove: $\triangle KLN \cong \triangle MLN$



30. **Given:** $\overline{PS} \perp \overline{SQ}$, $\overline{RQ} \perp \overline{QS}$,
 $\overline{PQ} \cong \overline{RS}$

Prove: $\triangle PSQ \cong \triangle RQS$

