NAME _____ DATE _____

# Cumulative Review

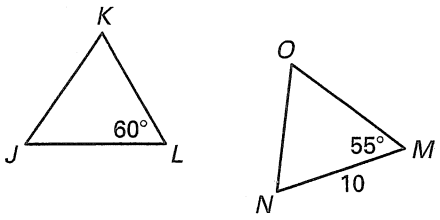
**For use after Chapters 1–4**

**In the diagram, $\triangle JKL \cong \triangle MNO$. Complete the statement. (4.2)**

15. $\angle N \cong$ ?

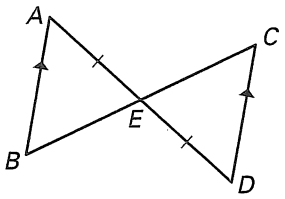
16. $JK =$ ?

17. $m\angle K =$ ?

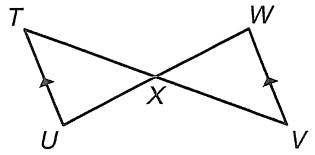



**Write a two-column proof. (4.3 and 4.4)**

18. **Given:** $\overline{AB} \parallel \overline{DC}$
$\overline{AE} \cong \overline{DE}$
**Prove:** $\triangle ABD \cong \triangle DCE$

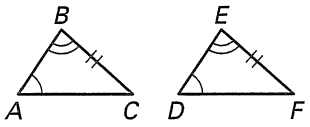



19. **Given:** $X$ is the midpoint of $\overline{UW}$.
$\overline{TU} \parallel \overline{VW}$
**Prove:** $\triangle TUX \cong \triangle VWX$




**State the theorem used to prove the triangles are congruent. (4.4, 4.6)**

20.

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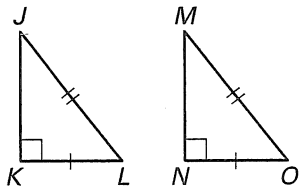
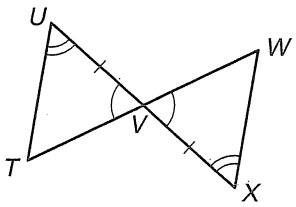
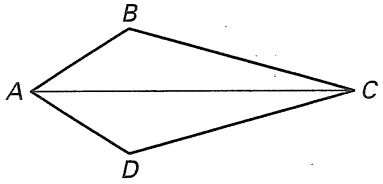



22.




**Write a two-column proof. (4.5)**

23. **Given:** $\overline{AD} \cong \overline{AB}$
$\overline{AC}$ bisects $\angle BAD$.
**Prove:** $\overline{BC} \cong \overline{DC}$




**Place the figure in a coordinate plane. Use the distance formula to find the given information. (4.7)**

24. Rectangle with length 8 units and width 6 units. Find the length of a diagonal.

25. Square with sides 5 units. Find the length of a diagonal to the nearest hundredth.