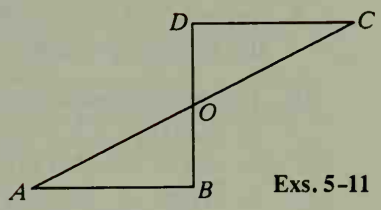
Classroom Exercises

Suppose you know that $\triangle FIN \cong \triangle WEB$.

1. Name the three pairs of corresponding sides.
2. Name the three pairs of corresponding angles.
3. Is it correct to say $\triangle NIF \cong \triangle BEW$?
4. Is it correct to say $\triangle INF \cong \triangle EWB$?

The two triangles shown are congruent. Complete.

5. $\triangle ABO \cong$ ___?___
6. $\angle A \cong$ ___?___
7. $\overline{AO} \cong$ ___?___
8. $BO =$ ___?___

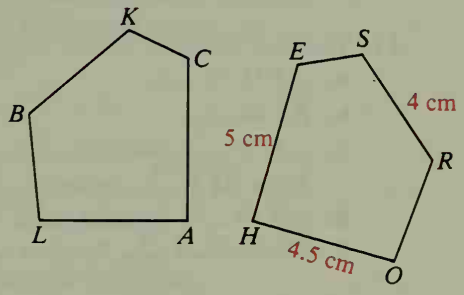


Exs. 5–11

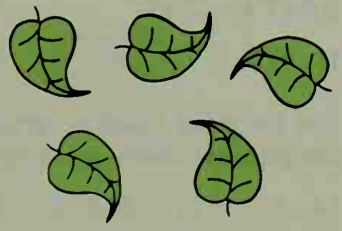
9. Can you deduce that O is the midpoint of any segment? Explain.
10. Explain how you can deduce that $\overline{DC} \parallel \overline{AB}$.
11. Suppose you know that $\overline{DB} \perp \overline{DC}$. Explain how you can deduce that $\overline{DB} \perp \overline{BA}$.

The pentagons shown are congruent. Complete.

12. B corresponds to ___?___.
13. $BLACK \cong$ ___?___
14. ___?___ $= m\angle E$
15. $KB =$ ___?___ cm
16. If $\overline{CA} \perp \overline{LA}$, name two right angles in the figures.



17. The five leaves shown are all congruent, but one differs from the others. Which one is different and how?



18. **a.** Name the coordinates of points A, B, and C.
    b. Name the coordinates of a point D such that $\triangle ABC \cong \triangle ABD$.
19. Name the coordinates of a point G such that $\triangle ABC \cong \triangle EFG$. Is there another location for G such that $\triangle ABC \cong \triangle EFG$?
20. Name the coordinates of two possible points H such that $\triangle ABC \cong \triangle FEH$.