Name _____ Date _____

LESSON 1.4

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Challenge Practice

For use with pages 24–34

In Exercises 1–4, tell whether the statement is *always*, *sometimes*, or *never* true. *Explain* your reasoning.

1. A pair of opposite rays form a straight angle.
2. The measures of two acute angles add up to 90°.
3. If C is in the interior of $\angle ADB$, then $\angle ADC \cong \angle CDB$.
4. When a ray bisects a straight angle, two congruent acute angles are formed.

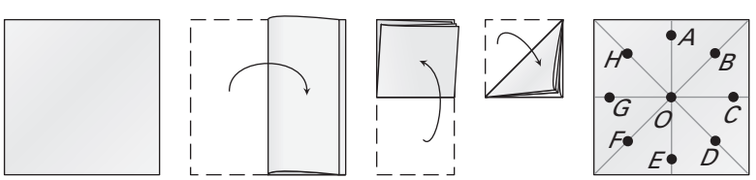
In Exercises 5–11, use the following information.

D is in the interior of $\angle BAE$. $m\angle BAC = 125°$

E is in the interior of $\angle DAF$. $m\angle EAC = 95°$

F is in the interior of $\angle EAC$. $m\angle BAD = m\angle EAF = m\angle FAC$

5. Draw a sketch that uses all of the given information.
6. Find $m\angle FAC$.
7. Find $m\angle BAD$.
8. Find $m\angle FAB$.
9. Find $m\angle DAE$.
10. Find $m\angle FAD$.
11. Find $m\angle BAE$.
12. Use a piece of paper folded in half three times and labeled as shown.



   a. Name eight congruent angles.
   b. Name eight right angles.
   c. Name eight congruent obtuse angles.
   d. Name two angles that share a common vertex and side (but no common interior points), and combine to form a straight angle.