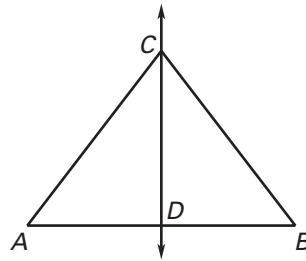NAME _____ DATE _____

Practice A

For use with pages 264–271

Use the diagram shown. $\overleftrightarrow{CD}$ is the perpendicular bisector of $\overline{AB}$.

1. What is the relationship between AD and AB?

2. What is the relationship between $\angle ADC$ and $\angle BDC$?

3. What is the relationship between AC and CB? Explain.

4. *True or False?* Because $\overleftrightarrow{CD}$ is the perpendicular bisector of $\overline{AB}$, $\overline{AC} \cong \overline{AD}$.

Use the diagram shown. $\overrightarrow{BD}$ is the angle bisector of $\triangle ABC$.

5. What is the relationship between $\angle ABD$ and $\angle CBD$?

6. What is the relationship between $\angle DAB$ and $\angle DCB$?

7. What is the relationship between AD and CD? Explain.

8. *True or False?* Because $\overrightarrow{BD}$ is the angle bisector of $\angle ABC$, $\overline{AB} \cong \overline{CB}$.
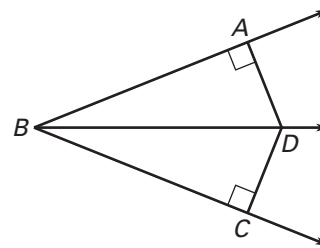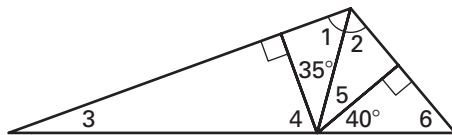
Use the diagram to answer the following. In the diagram, *F* is on the bisector of $\angle DAE$.

9. If $m\angle BAF = 54°$, then $m\angle CAF = $ ___?___ .

10. If $FC = 16$, then $FB = $ ___?___ .

11. If $\overline{GD} \cong \overline{GE}$, then what can you conclude about point G?

12. Is $\triangle ABF \cong \triangle ACF$? Explain.
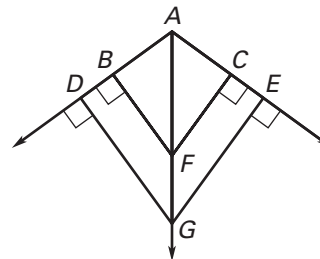
Find the measure of the numbered angles.

13.

14.