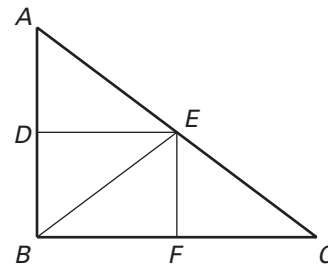


Practice A

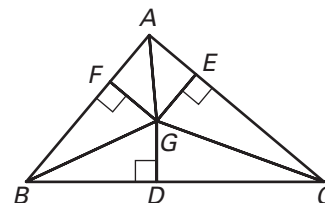
For use with pages 272–278

Use the diagram shown. E is the circumcenter of $\triangle ABC$.



1. $\overline{DA} \cong$?
2. $\overline{EA} \cong$?
3. $\angle EFC \cong$?
4. $\overline{BE} \cong$? and ?
5. If $AD = 6$, $BF = 8$, and $CE = 10$, what is the perimeter of $\triangle ABC$?

Use the diagram shown. G is the incenter of $\triangle ABC$.



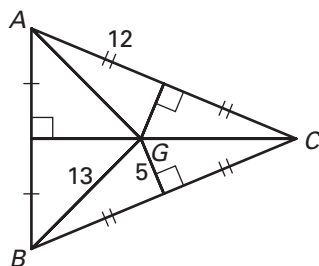
6. $\angle GCA \cong$?
7. $\angle ABG \cong$?
8. $\angle GEC \cong$?
9. $\overline{GD} \cong$? and ?
10. What method could be used to prove $\triangle GFA \cong \triangle GEA$?

Decide whether the statement is *true* or *false*. Illustrate your answer with a sketch.

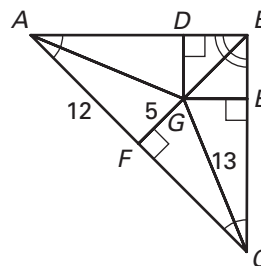
11. The angle bisector of a triangle could also be the perpendicular bisector.
12. The angle bisectors of a triangle always intersect inside the triangle.
13. The perpendicular bisectors of a triangle always intersect inside the triangle.
14. The circumcenter is the center of the inscribed circle of a triangle.

Find the indicated measure in each exercise.

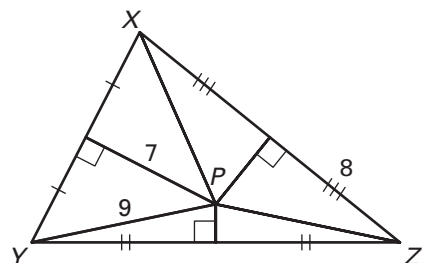
15. The perpendicular bisectors of $\triangle ABC$ meet at point G . Find GA .



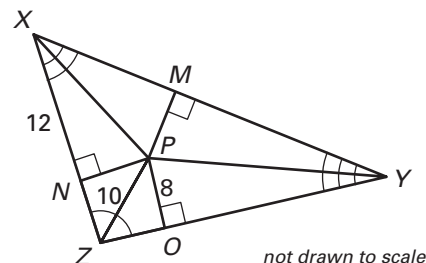
16. The angle bisectors of $\triangle ABC$ meet at point G . Find GD .



17. The perpendicular bisectors of $\triangle XYZ$ meet at point P . Find PX .



18. The angle bisectors of $\triangle XYZ$ meet at point P . Find PM .



not drawn to scale