



## Puzzle Time

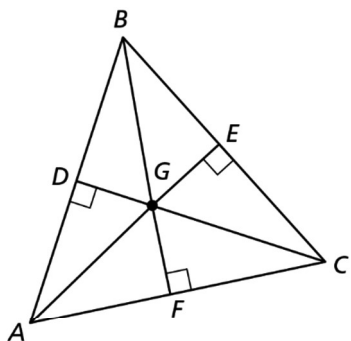
### What Did The Computer Do At Lunchtime? It . . .

Write the letter of each answer in the box containing the exercise number.

#### Complete the sentence.

- When three or more lines, rays, or segments intersect in the same point, they are called \_\_\_\_\_ lines, rays, or segments.
- The circumcenter of a triangle is \_\_\_\_\_ from the vertices of the triangle.
- The angle \_\_\_\_\_ of a triangle are concurrent.
- The \_\_\_\_\_ of the triangle is the point of intersection of angle bisectors.
- The incenter of a triangle always lies \_\_\_\_\_ the triangle.

Find the indicated measure using the diagram. The perpendicular bisectors are at points  $D$ ,  $E$ , and  $F$ . Angle bisectors are at  $A$ ,  $B$ , and  $C$ .



- $AG = 13$ ,  $BD = 5$ ; Find  $GD$ .
- $GF = 8$ ,  $GC = 17$ ; Find  $AF$ .
- $G$  is the incenter,  $GD = 4x - 1$ , and  $GE = 3x + 5$ ; Find  $GF$ .

6	1	5		4		3	8	2	7
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#### Answers

- H. 12
- U. circumcenter
- D. inside
- T. equiangular
- N. measurements
- A. concurrent
- M. 5
- R. outside
- E. 15
- Y. 23
- E. 6
- B. bisectors
- O. congruent
- S. 18
- T. equidistant
- A. incenter