$\qquad$
9.3 Puzzle Time

## Why Did The Forest Ranger Change Jobs?

| A | B | C | D | E | F |
| :--- | :--- | :--- | :--- | :--- | :--- |
| G | H | I |  |  |  |

Complete each exercise. Find the answer in the answer column. Write the word under the answer in the box containing the exercise letter.

| 26.5 |
| :---: |
| LEAF |
| bisector WAS |
| geometric <br> HE |
| $\begin{gathered} 9.1 \\ \text { TIME } \end{gathered}$ |
| $\begin{gathered} 15.5 \\ \text { то } \end{gathered}$ |
| $\triangle C B D$ WANTED |
| $\begin{gathered} 18.8 \\ \text { FOREST } \end{gathered}$ |
| $7.1$ <br> OVER |
| $\begin{aligned} & 27.6 \\ & \text { END } \end{aligned}$ |

Complete the sentence.
A. If the $\qquad$ is drawn to the hypotenuse of a right triangle, then the two triangles formed are similar to the original triangle and to each other.
B. In a right triangle, the altitude from the right angle to the hypotenuse divides the hypotenuse into two segments. The length of the altitude is the $\qquad$ mean of the lengths of the two segments.
C. Identify the smallest similar triangle using the diagram for $\triangle A B C$.


Find the value of $\boldsymbol{x}$. Round your answer to the nearest tenth.
D. $A C=63, A B=16$,
$C B=65$
E. $A C=12, A B=5, C B=13$
F. $A C=15, A B=8, C B=17$


Find the geometric mean of the two numbers. Round your answer to the nearest tenth.
G. 15 and 24
H. 18 and 30
I. 20 and 35

| length THE |
| :---: |
| 23.2 <br> NEW |
| $\triangle B C D$ GRASS |
| altitude BECAUSE |
| $16.5$ <br> GREENER |
| 23.1 <br> WITH |
| $\begin{gathered} 4.6 \\ \text { TURN } \end{gathered}$ |
| 5.4 <br> TREE |
| $\begin{gathered} 19.0 \\ \text { A } \end{gathered}$ |

