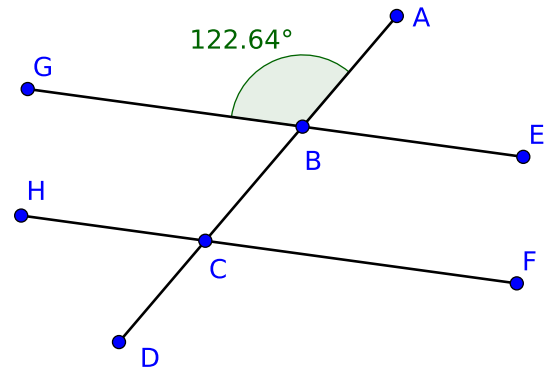


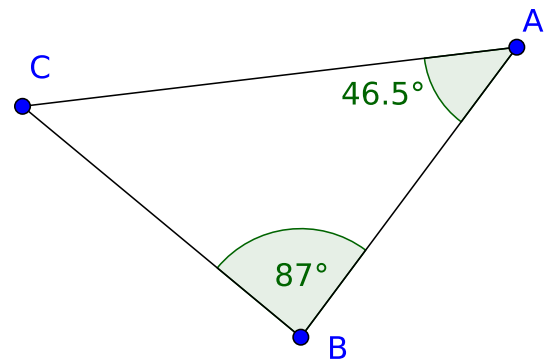
## Section 1.2 - Angle Relationships, Similar Triangles

### GEOMETRIC PROPERTIES

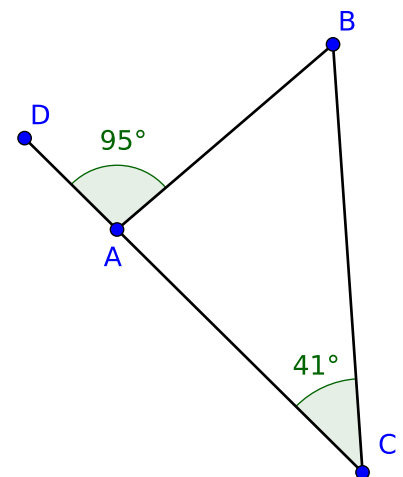
1. Find all angle measures on the diagram below.



2. Find all angle measures on the diagram below.

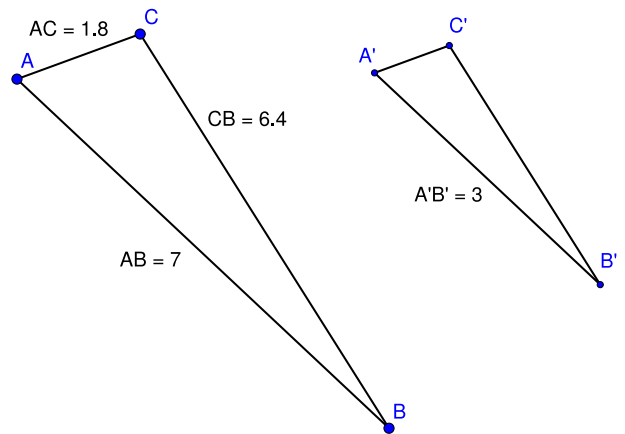


3. Find all angle measures on the diagram below.

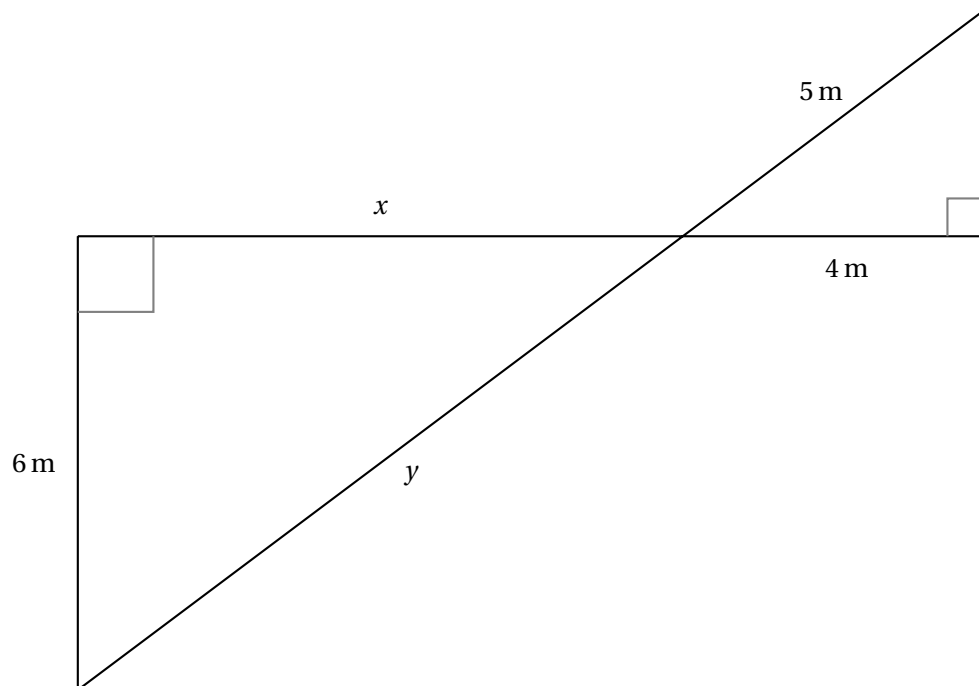


## SIMILAR TRIANGLES

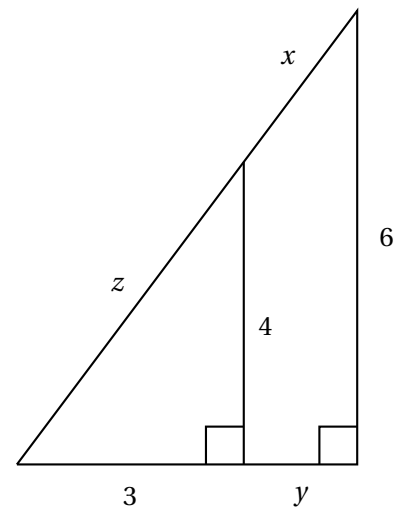
4. Find the remaining sides of these two similar triangles.



5. Find the lengths of  $x$  and  $y$  in the figure below. It would help to recall Pythagorean's Theorem for triangles.



5. Find the lengths for  $x$  and  $y$  in the figure to the right. It might help to recall Pythagorean's theorem for triangles.



5. If a tree casts a shadow that is 100 feet long, and a 6 foot tall person casts a shadow that is 5 feet long, what is the height of the tree?