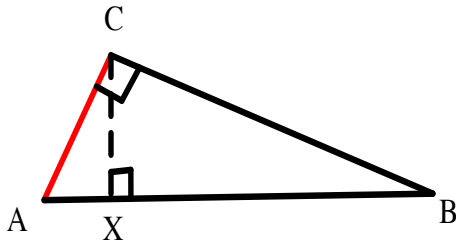


## Geometric Mean Theorems – Right Triangles – Side

Side is Geometric Mean between Segment Adjacent to Hypotenuse and Hypotenuse



$$\frac{AX}{AC} = \frac{AC}{AB}$$

Use the diagram above to answer the following questions.

1. Find  $AC$  if  $AX = 4$  and  $AB = 9$
2. Find  $AC$  if  $AX = 2$  and  $AB = 8$
3. Find  $AX$  if  $AC = 8$  and  $AB = 16$
4. Find  $AB$  if  $AC = 6$  and  $AX = 4$ . Find  $XB$ .
5. Find  $AB$  if  $AC = 10$  and  $AX = 5$ . Find  $XB$ .
6. Find  $AC$  if  $AX = 3$  and  $AB = 8$ . Find  $XB$ .
7. Find  $AX$  if  $AC = 2\sqrt{3}$  and  $AB = 8$
8. Rewrite the formula if we used side  $BC$ .