

Practice 7-4

Similarity in Right Triangles

Algebra Find the geometric mean of each pair of numbers.

1. 32 and 8

2. 4 and 16

3. 11 and 7

4. 2 and 22

5. 10 and 20

6. 6 and 30

} Use a proportion
 $\frac{a}{x} = \frac{x}{b}$

Algebra Refer to the figure to complete each proportion.

7. $\frac{x}{h} = \frac{?}{y}$

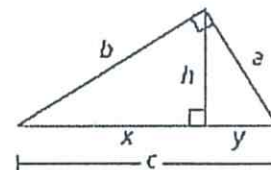
8. $\frac{a}{b} = \frac{?}{h}$

9. $\frac{a}{b} = \frac{h}{?}$

10. $\frac{a}{c} = \frac{y}{?}$

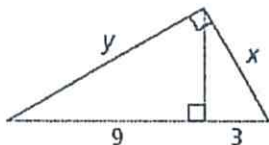
11. $\frac{a}{c} = \frac{h}{?}$

12. $\frac{b}{x} = \frac{?}{b}$

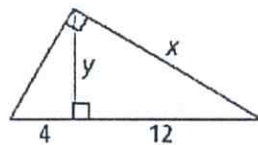


Algebra Find the values of the variables.

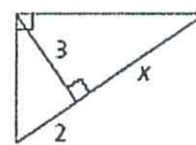
13.



14.



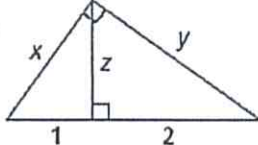
15.



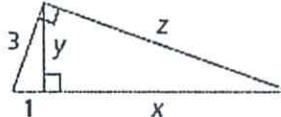
16.



17.



18.



19. The altitude to the hypotenuse of a right triangle divides the hypotenuse into segments 6 in. and 10 in. long. Find the length h of the altitude. Draw a picture first.

For 13-19,
 Set up and
 solve using
 proportions!