

# Practice 8-4

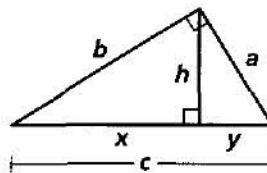
## Similarity in Right Triangles

**Algebra** Find the geometric mean of each pair of numbers.

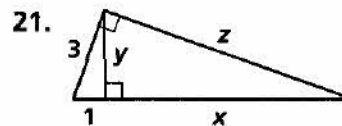
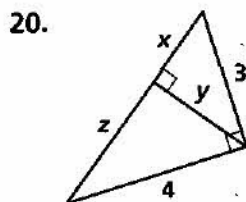
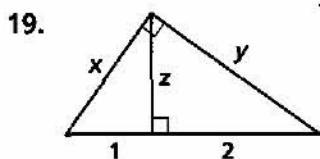
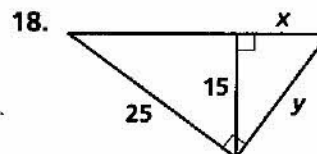
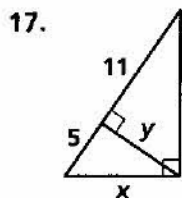
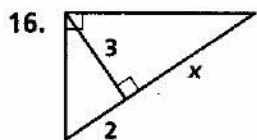
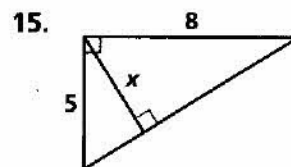
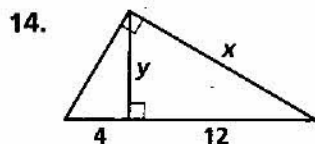
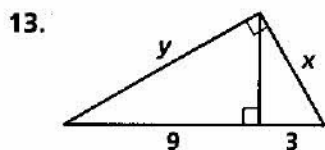
- |             |              |             |
|-------------|--------------|-------------|
| 1. 32 and 8 | 2. 4 and 16  | 3. 11 and 7 |
| 4. 2 and 22 | 5. 10 and 20 | 6. 6 and 30 |

**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.



22. 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.