

Find the geometric mean of each pair of numbers. Leave all answers in simplest radical form.

1. 5 and 20

2. 4 and 8

3. 3 and 15

4. 12 and 2

Use the figure at the right to complete each statement or proportion.

5. c is equal to _____ + _____.

6. The altitude of the triangle is _____.

7. The legs of the triangle are _____ and _____.

8. The hypotenuse of the triangle is _____ or _____.

9. z is the geometric mean of _____ and _____.

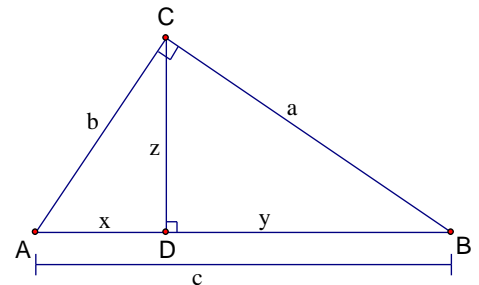
10. b is the geometric mean of _____ and _____ or _____ and _____.

11. a is the geometric mean of _____ and _____ or _____ and _____.

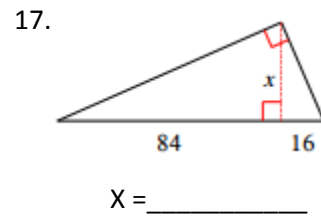
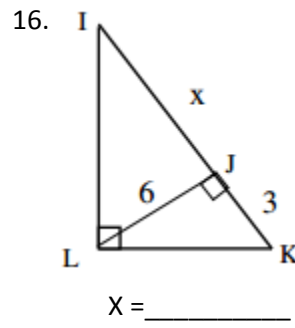
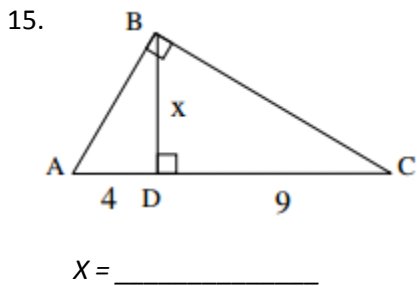
12. $\frac{x}{z} = \frac{z}{c}$

13. $\frac{x}{b} = \frac{b}{c}$

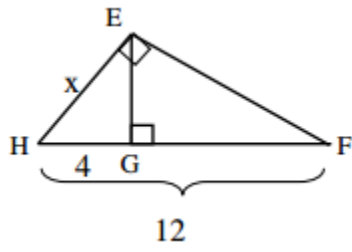
14. $\frac{a}{z} = \frac{z}{c}$



Find the value of each variable. Leave answers in simplest radical form. Show your work!!!

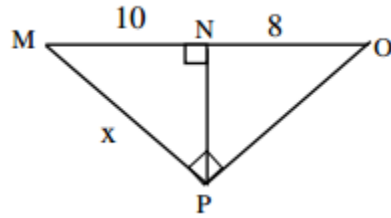


18.



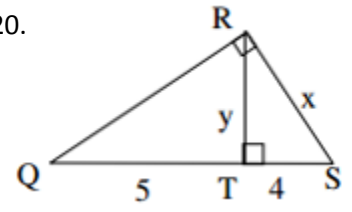
$x = \underline{\hspace{2cm}}$

19.



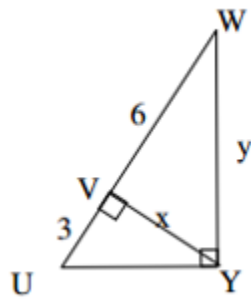
$x = \underline{\hspace{2cm}}$

20.



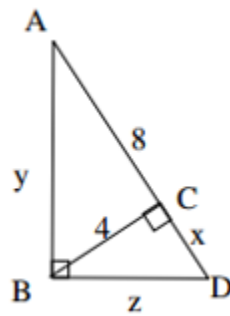
$x = \underline{\hspace{1cm}} \quad y = \underline{\hspace{1cm}}$

21.



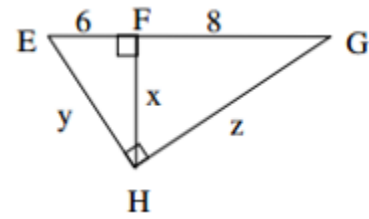
$x = \underline{\hspace{1cm}} \quad y = \underline{\hspace{1cm}}$

22.



$x = \underline{\hspace{1cm}} \quad y = \underline{\hspace{1cm}} \quad z = \underline{\hspace{1cm}}$

23.



$x = \underline{\hspace{1cm}} \quad y = \underline{\hspace{1cm}} \quad z = \underline{\hspace{1cm}}$