

Write the proportion. Then find the geometric mean of each pair of numbers. Leave all answers in simplest radical form.

1. 5 and 20

2. 4 and 8

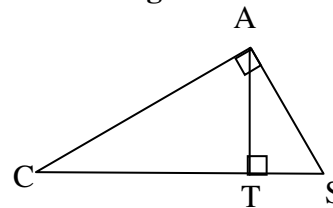
3. 3 and 15

4. 12 and 2

Use the right triangle on the right to complete the following.

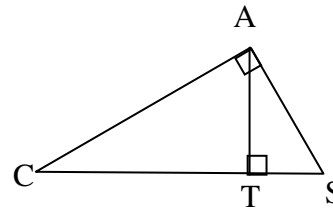
5. The altitude to the hypotenuse is the geometric mean of the two segments of the hypotenuse.

$$\frac{\quad}{AT} = \frac{\quad}{\quad}$$

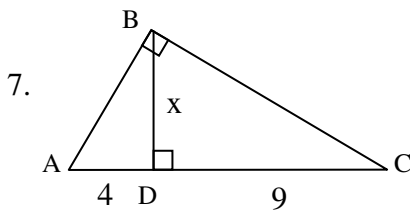


6. The leg is the geometric mean between hypotenuse and the adjacent part of the hypotenuse

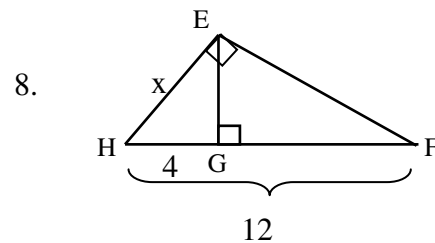
$$\frac{\quad}{CA} = \frac{\quad}{\quad} \quad \text{and} \quad \frac{\quad}{AS} = \frac{\quad}{\quad}$$



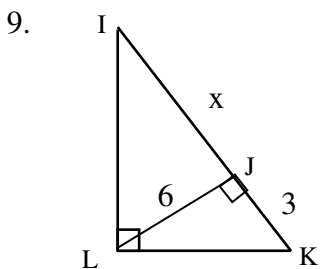
Find the value of each variable. Leave answers in simplest radical form. Show work!!!!



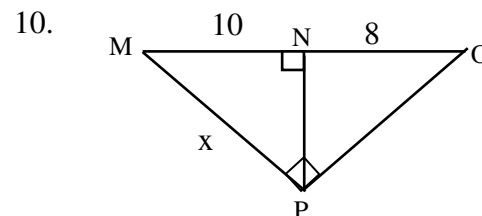
x = _____



x = _____

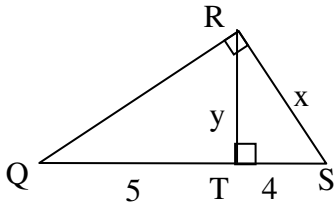


x = _____



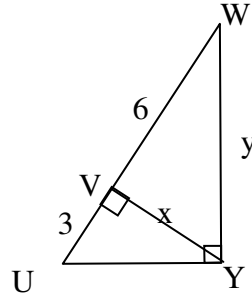
x = _____

11.



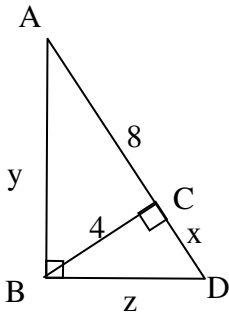
$x =$ _____ $y =$ _____

12.



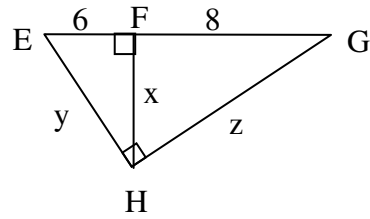
$x =$ _____ $y =$ _____

13.



$x =$ _____ $y =$ _____ $z =$ _____

14.



$x =$ _____ $y =$ _____ $z =$ _____

ANS BANK.(All answers will be used. Some answers may be used twice)

2, 6, 10, 12, $3\sqrt{2}$; $4\sqrt{2}$; $4\sqrt{3}$; $2\sqrt{5}$; $3\sqrt{5}$; $6\sqrt{5}$; $4\sqrt{5}$; $2\sqrt{6}$; $3\sqrt{6}$; $4\sqrt{7}$; $2\sqrt{21}$;