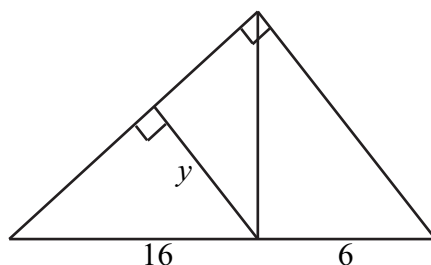


Handout 1: The Geometric Meaning of Life



1. Find exact value of y in the above figure.
2. What is the geometric mean of 7 and 11?
3. What is the geometric mean of 15.6 and 20.2?
4. What is the geometric mean of 70 and 80?
5. The geometric mean of 8 and another number is 16. What is the other number?
6. What is the length of a triangle's altitude if the hypotenuse is split into 8 and 5?
7. What is the length of a triangle's altitude if the hypotenuse is split into 16 and 2?
8. The altitude of a triangle is 50 and the hypotenuse is split into x and $5x$. What is the value of x ?
9. What is the length of a triangle's altitude if the hypotenuse is split into 20 and 5?
10. A park in the shape of a right triangle is constructed, with the legs of the triangle at the intersection of two streets. The park extends 500 feet along one street and 430 feet along the other. The remaining side of the park is 659.5 feet. If a straight pathway through the park is built along the altitude, how long will this path be?