

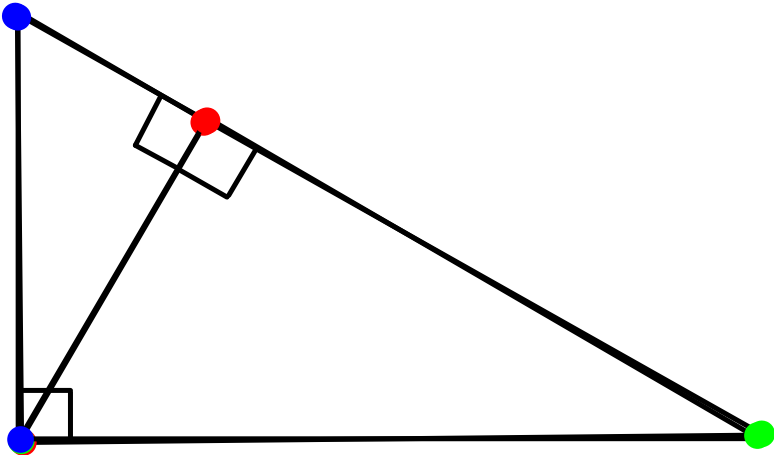
Def. Geometric Mean

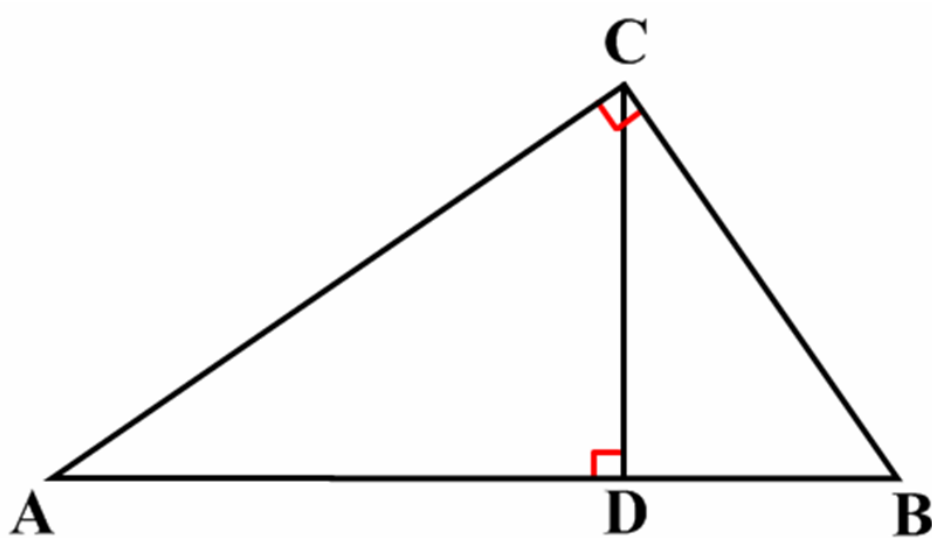
A proportion where the 2 mean #s are equal to each other.

$$\frac{\mathbf{a}}{\mathbf{x}} = \frac{\mathbf{x}}{\mathbf{c}}$$

Th. 8-1

If the altitude is drawn from the vertex of the rt. $\angle$ of a rt. Δ to its hypotenuse, then the 2 Δ 's are $\sim$ to the original Δ and to each other.

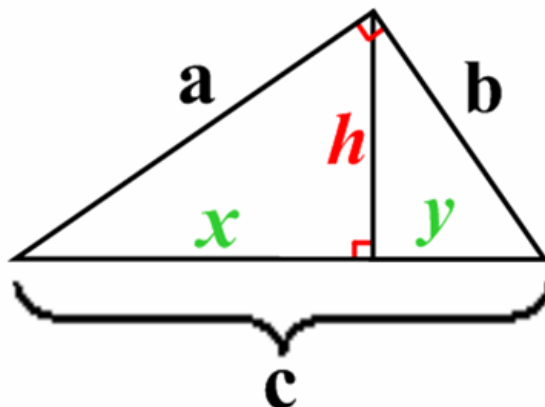




Th. 8.2 Height Th.

If a rt. $\triangle$ has an altitude drawn to the hypotenuse, the following proportion is always true.

$$\frac{x}{h} = \frac{h}{y}$$



Th. 8-3 Leg Th.

If a rt. $\triangle$ has an altitude drawn to the hypotenuse, the following proportions are always true.

$$\frac{c}{a} = \frac{a}{x}$$

or

$$\frac{c}{b} = \frac{b}{y}$$

