Vocabulary: Similarity in Right Triangles



**Vocabulary**

* Geometric mean – the positive number *x* such that  = , where *a* and *b* are positive numbers.
	+ For example, the geometric mean of 2 and 18 is 6, because  = .
* Note that 2  3 = 6, and 6  3 = 18.
* Also note that the *arithmetic mean* of 2 and 18 is 10, since  = 10.
	+ The two *x*’s are called the *means* of the proportion  = , and *a* and *b* are called the *extremes*.

* Similar – having the same shape, but not necessarily the same size.
	+ The symbol ∼ means “is similar to.”
	+ Two polygons are similar when all corresponding angles are congruent.
* For example, in the figure to the right,
Δ*ABC* ∼ Δ*EFG*.