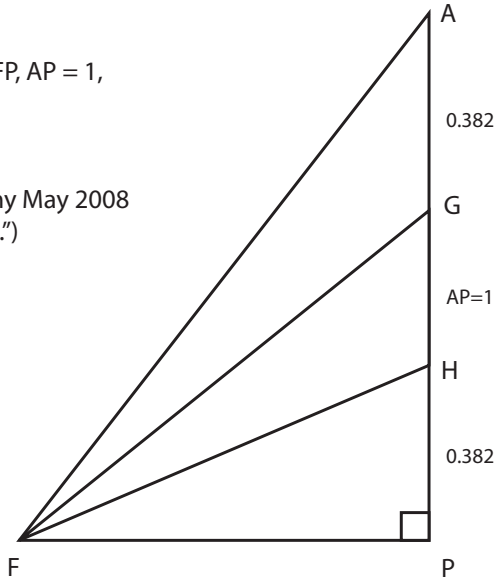
problem corner

Problem 233

by Benjamin Bloch, Ph.D.

In right triangle AFP: FH bisects angle AFP, AP = 1, and AG = HP = 0.382.
Determine all angle and sides.

(This problem stems from research for my May 2008 guest editorial, "Astro-Archeo-Surveying.")