```
% SAS
% This program solves any triangle, if we know any
% two sides and the angle between them. It computes
% the remaining data and outputs the triangle data
% as SIDE ANGLE SIDE ANGLE SIDE ANGLE, clockwise
% or counterclockwise, depending on the order in
% you entered your data.
% By L.Linares 2011

%                       A3
%                      /|
%                   S1/ |
%                    /  |S3
%                   /   |
%                A1 ---- A2
%                    S2

% VERY IMPORTANT: To type this program on a regular
%   text file, I had to replace some HP50 keys by
%   certain strings. So ...
%   Where I wrote        you type
%        *               [multiply key]
%        ACOS            [WHITE SHIFT] COS
%        ^               [y to the x key]
%        SQRT            press square root key (*)
%        ->TAG           [WHITE SHIFT] PRG/TYPE/->TAG
%        ->              [RED SHIFT] [zero key]
%   (*) Do NOT type the letters SQRT ... it won't work!
% Usage: Enter on the stack
%        3: S1
         2: A1(in degrees)
         1: S2  ... and call this program.
% VERY IMPORTANT: Store this program with the name 'SAS'
% as other programs in this series will call it.
% This program is provided on a "as is" basis, for
% reference ONLY, and no warranty of its accuracy or
% correctness is made. If you use it, you use it at your
% own risk.


<< -17 FS?
   -> S1 A1 S2 X

   << IF 'X==1' THEN DEG END
      'SQRT(S1^2+S2^2-2*S1*S2*cos(A1))' EVAL

      -> S3

      << S1 S2 S3 'SSS' EVAL >>
      IF 'X==1' THEN RAD END

   >>

>>
```