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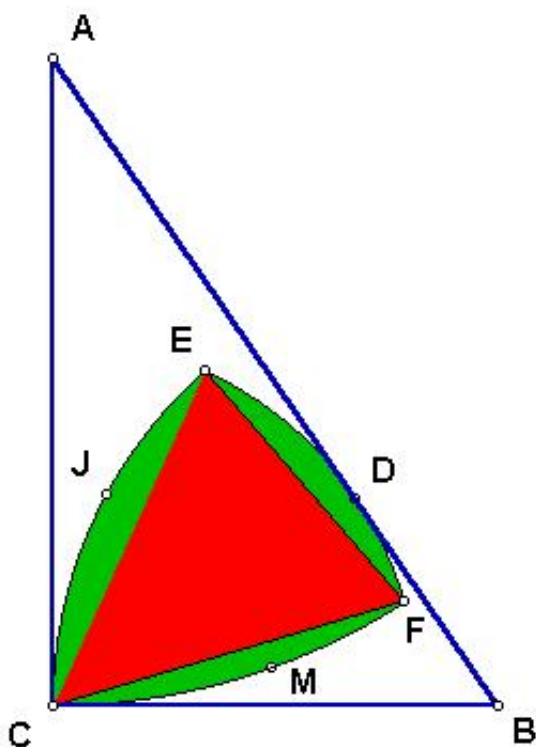
Two "triangles" in the right triangle

The problem

This problem is connected with [my post to geometry-puzzles newsgroup](#),
 and with my previous [problem No. 42](#).

Solve [the problem No. 42](#),

for the case when the triangle ABC has the *right* angle ACB , legs $a=BC$,
 $b=CA$, and hypotenuse $c=AB$, see the Figure:



First, do next six easy construction steps:

- 1A. Draw the circle with center at A , and with radius $b=AC$;
- 1B. draw the circle with center at B , and with radius $a=BC$;
- 1C. draw the circle with center at C , and with radius CD , height to hypotenuse AB ;
- 2A. find point E (inside the triangle ABC !) of intersection of circles in 1B and 1C;
- 2B. find point F (inside the triangle ABC !) of intersection of circles in 1A and 1C;
- 2C. the vertex C is point (inside the triangle ABC !) of intersection of circles in 1A and 1B.