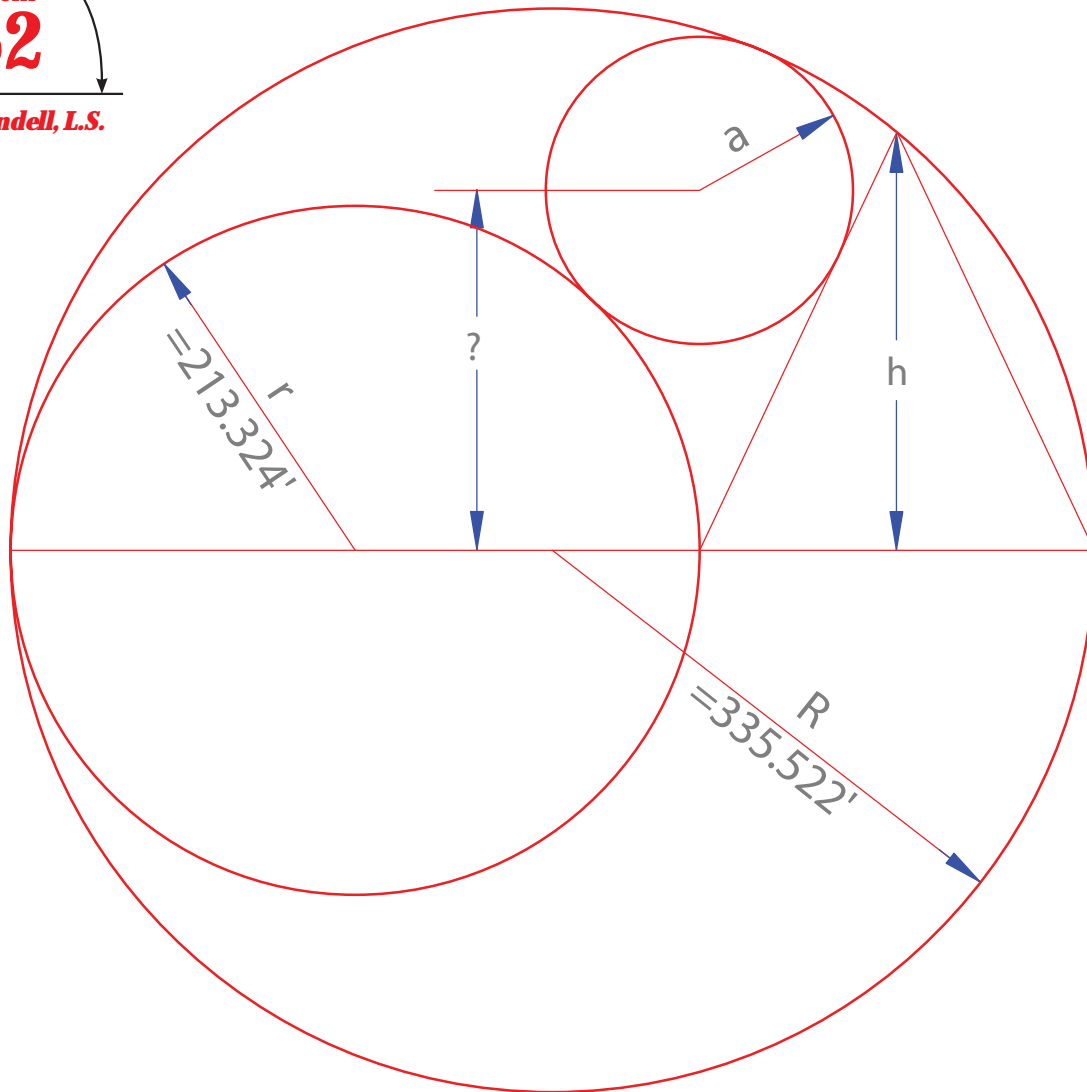


Problem
152

by Dave Lindell, L.S.



The circle of radius "r" is drawn with its center on the diameter of the circle with radius "R" and tangent to the inside of it. The triangle is isosceles with its base being the remainder of the diameter not used by the circle with radius r.

What is the diameter of the circle with radius "a" if it is tangent to the triangle and both of the circles?

How far from the diameter of circle with radius "R" is the radius point of the circle with radius "a"?

What is the altitude of the triangle?



Problem
153

by Benjamin Bloch, Ph.D.

For a change of pace let's have some fun with word problems. Solve them by going for the gold.

Solve the following proportion:

- a) In the beginning was W,
and W was with G,
and W was G,
as in the beginning.

Take $G = 1$

Added dimension:

- b) What number when increased by one becomes its own square?

Special question:

What is the geographical significance to "Go Down Moses, Way Down in Egypt Land"?