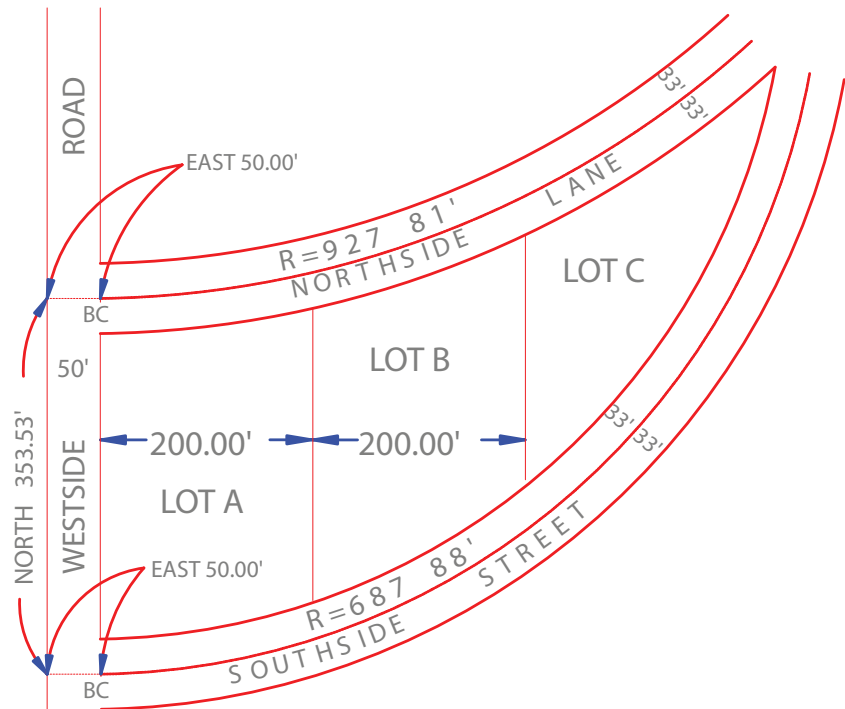


**Problem 156**

by Dave Lindell, L.S.

What are the dimensions and area of lot C, (including radial bearings to the corners)?



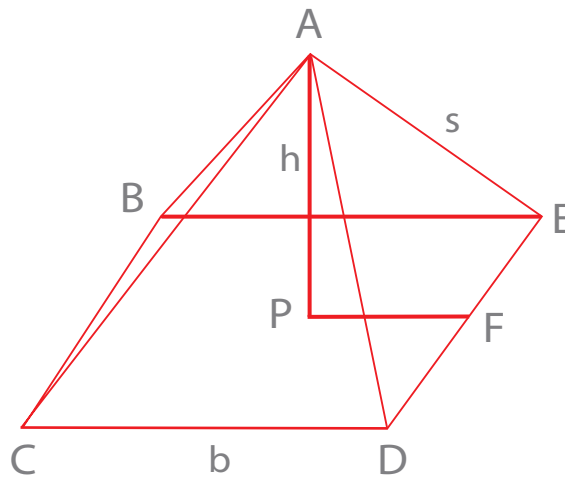
**Problem 157**

by Benjamin Bloch, Ph.D.

**Great Pyramid at Giza Problem**

The Great Pyramid at Giza was designed so that the perimeter of its square base was equal to the circumference of a circle whose radius is the pyramid's height. (This is called Squaring the Circle.)

The following is a representation of the Great Pyramid at Giza. The base BCDE is a square with side  $b$ . Point P is at the center of the base; AP is the pyramid height  $h$ , and the length of each pyramid side is  $s$ .



From this information determine:

- 1- The Great Pyramid angle, the numerical value in degrees of the angle formed by each face, such as ADE, with the horizontal.
- 2- The approximate area of each face in terms of the pyramid height,  $h$ .
- 3- The approximate value of the length of side  $s$  in terms of the height,  $h$ .

Solutions are on our website at [www.profsurv.com](http://www.profsurv.com)