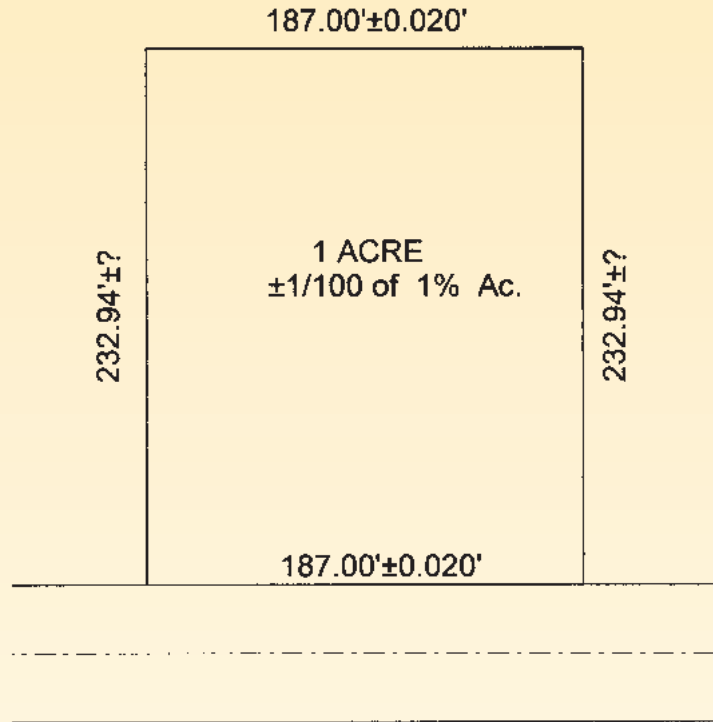


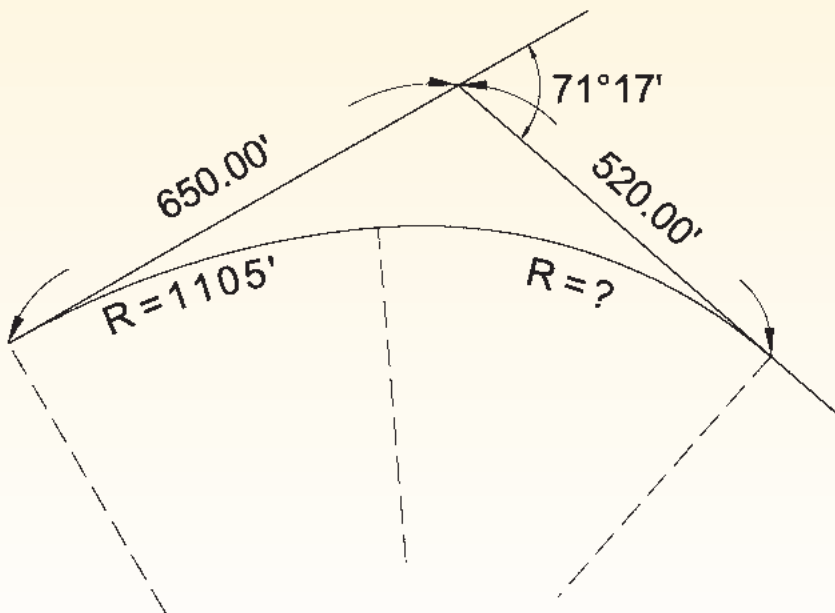
This month's challenges require you to work with an error budget and determine curve elements. Solutions can be found on our website at [www.profsurv.com](http://www.profsurv.com).

### Problem 45

You have been retained to layout 1 acre within 1/100 of 1% of an acre. You know the frontage is  $187.00' \pm 0.020'$ . What is the error budget in the depth? If your total station claims to measure  $\pm (5\text{mm} + 5\text{ppm})$  will it be able to meet the requirement?



### Problem 46



A curve with a radius of 1105' begins tangent to a line at a point 650.00' from an intersection with another line, as shown. What radius curve will make a compound curve tangent to the second line at a point 520.00' from the intersection of the two lines? What will be the central angles of the two curves?



The problems for this column are contributed by retired California surveyor Dave Lindell, LS.