This month’s trigonometry challenges involve finding the elevation of a point and determining the radii to join two streets. The solutions to Problems 7 and 8, which appeared in the November issue, follow on page 67.

Problem Number 9
Three level circuits were run from three bench marks to point “P”. If bench mark “A” is elevation 146.522’, bench mark “B” is elevation 146.851’ and bench mark “C” is elevation 132.768, what is the weighted average elevation of point “P”?

Problem Number 10
A minor subdivision requires the owner to dedicate the property needed to join two existing streets of non-equal width. If the reverse curves have equal radii but not necessarily the same radii for each side of the street, what are the two radii and central angles of the four curves?

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