24 HORIZONTAL CURVES

Asterisks (*) indicate problems that have partial answers given in Appendix *G*.

24.1 What features make a spiral curve a particularly useful easement curve?

From Section 24.1, paragraph 3: "A spiral makes an excellent easement curve because its radius decreases uniformly from infinity at the tangent to that of the curve it meets."

24.2 For the following circular curves having a radius *R*, what is their degree of curvature by (1) arc definition and (2) chord definition?

(a)*	500.00 ft	(1) **11°27′33″**	(2) **11°28′42″**
(b)	900.00 ft	(1) **6°21′58″**	(2) **6°22′10″**
(c)	2500.00 ft	(1) **2°17′31″**	(2) **2°17′31″**

Compute *L, T, E, M, LC, R*, and stations of the PC and PT for the circular curves in Problems 24.3 through 24.6. Use the chord definition for the railroad curve and the arc definition for the highway curves.