10 TRAVERSE COMPUTATIONS

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

10.1   What are the usual steps followed in adjusting a closed traverse?

From Section 10.1, paragraph 3: "The usual steps followed in making elementary traverse computations are (1) adjusting angles or directions to fixed geometric conditions, (2) determining preliminary azimuths (or bearings) of the traverse lines, (3) calculating departures and latitudes and adjusting them for misclosure, (4) computing rectangular coordinates of the traverse stations, and (5) calculating the lengths and azimuths (or bearings) of the traverse lines after adjustment."

10.2*   The sum of seven interior angles of a closed-polygon traverse each read to the nearest 3″ is 899°59′39″. What is the misclosure, and what correction would be applied to each angle in balancing them by method 1 of Section 10.2?

Misclosure = −21″; Apply +3″ correction per angle