Solution to Problem 35

DRAW LINE R-r

ASSIGN COORDINATES TO R, SAY N=1000, E=1000. LET R-B EQUAL "NORTH"

AND TRAVERSE TO r. (N=962.738, E=1311.309)

INVERSE FROM R TO r: S 83°10’28” E 313.5314’

SOLVE TRIANGLE R-P-r BY LAW OF COSINES FOR ALL ANGLES:

P-R-r = 45°12’44”, R-r-P = 70°57’23”, r-P-R = 63°49’53”

CALCULATE BEARINGS FOR LINES R-P AND r-P AND SOLVE FOR THE

CENTRAL ANGLES BY THE BEARING RELATIONSHIPS OF THE RADIAL LINES:

B-R-P = 51°36’48”, P-r-E = 59°18’20”