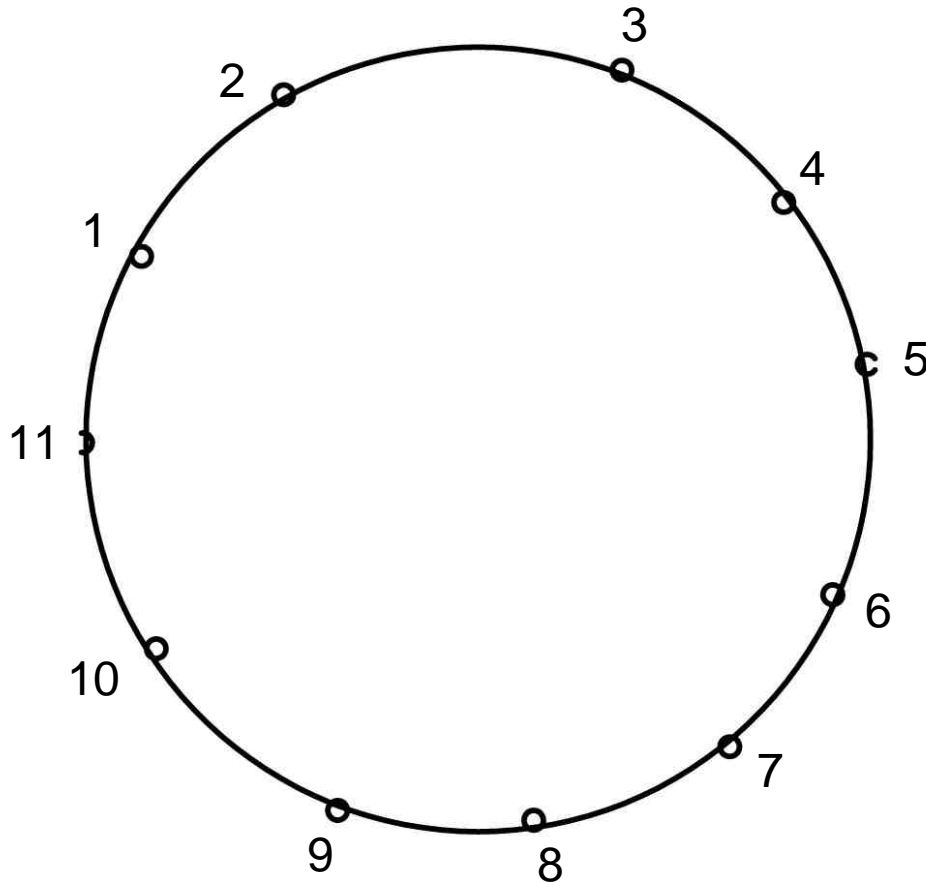


CE506 Homework #10, assigned 22-Nov, due 3-Dec

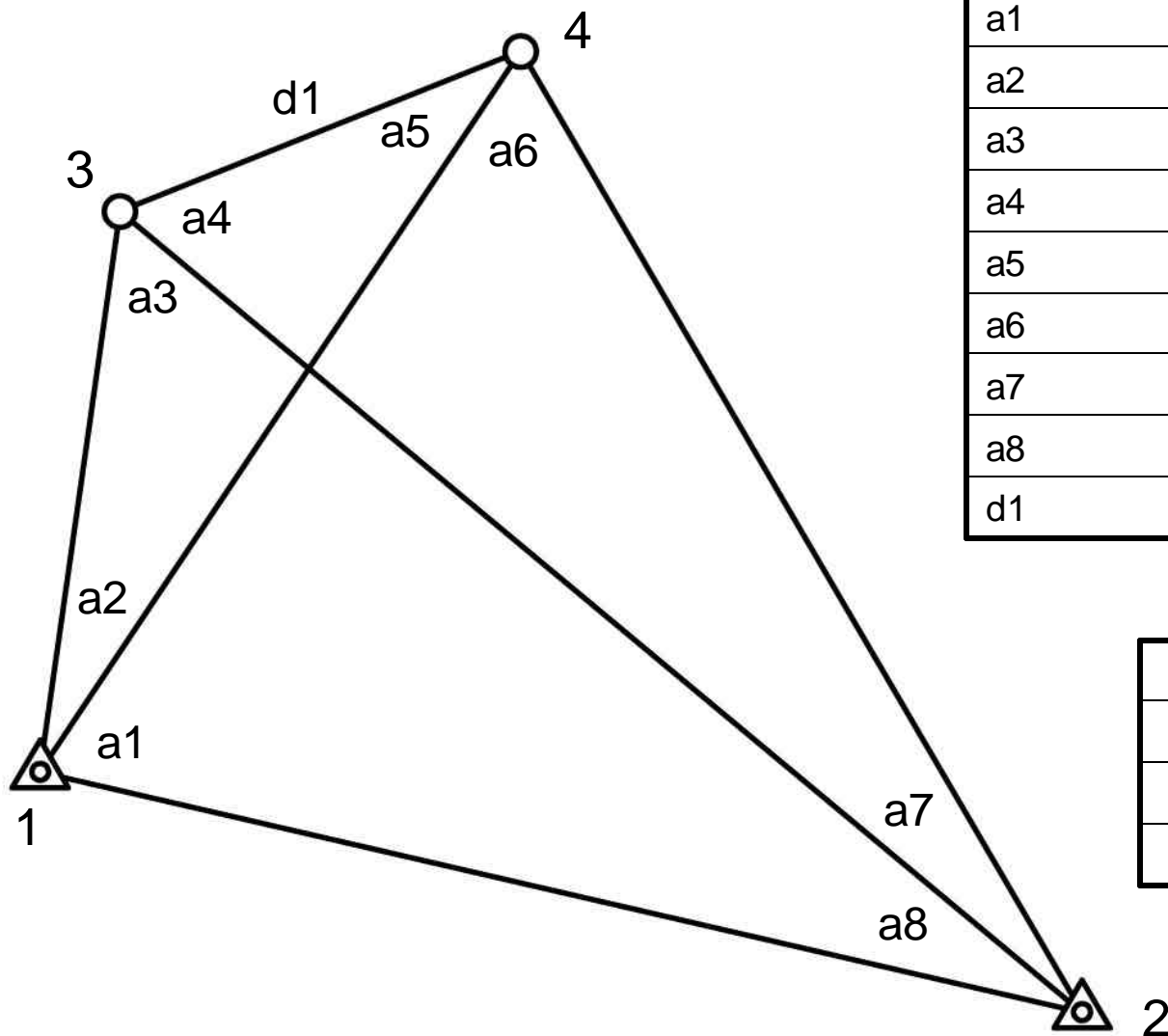
1. Determine by general least squares the circle parameters that fit the indicated points. Sigma of all coordinate data is 0.2. Report, as a minimum, the circle parameters and the observation residuals.



X	Y
10.5	44.9
13.2	48.2
16.5	49.9
21.2	49.2
24.3	47.1
25.8	43.1
25.6	39.1
22.3	35.4
18.1	33.9
14.3	35.1
11.0	38.0

(more)

2. Adjust the following quadrilateral figure, using points 1 & 2 as fixed control points, with eight angle observations (sigma = 10 sec), and one distance observation (sigma = 0.03 m). Use either Starnet or Move3. Option: confirm the results with your own network program.



Observations	
a1	69-18-12 dms
a2	25-33-19
a3	58-19-30
a4	61-36-28
a5	34-30-19
a6	63-56-59
a7	19-56-29
a8	26-48-39
d1	538.546 m

Control Points		
	X	Y
1	3400.0 m	7800.0 m
2	4700.0 m	7500.0 m