CENTERS
OLD SAN DIEGO
1886

8

2

F.B.80

80

MICROFILMED
DEC 7 1964

Table showing the difference of latitude and departure in running 80 chains at any course from 1 to 60 minutes.

Minutes.	Lks.	Minutes.	Lks.	Minutes.	Lks.
1	2⅓	21	49	41	95⅔
2	4⅔	22	51⅓	42	98
3	7	23	53⅔	43	100⅓
4	9⅓	24	56	44	102⅔
5	11⅔	25	58⅓	45	105
6	14	26	60⅔	46	107⅓
7	16⅓	27	63	47	109⅔
8	18⅔	28	65⅓	48	112
9	21	29	67⅔	49	114⅓
10	23⅓	30	70	50	116⅔
11	25⅔	31	72⅓	51	119
12	28	32	74⅔	52	121⅓
13	30⅓	33	77	53	123⅔
14	32⅔	34	79⅓	54	126
15	35	35	81⅔	55	128⅓
16	37⅓	36	84	56	130⅓
17	39⅔	37	86⅓	57	133
18	42	38	88⅔	58	135⅓
19	44⅓	39	91	59	137⅔
20	46⅔	40	93⅓	60	140

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Table for Running on Slopes.

In the following table the first column shows the angle, the second, the number of links to be added to a chain on the slopes, to make one chain, horizontal measurement.

Angle.	Cor. in links.	Angle.	Cor. in links.	Angle.	Cor. in links.	Angle.	Cor. in links.
°		°		°		°	
4	0·24	11	1·88	18	5·14	25	10·54
5	0·38	12	2·24	19	5·76	26	11·26
6	0·55	13	2·63	20	6·42	27	12·24
7	0·76	14	3·06	21	7·11	28	13·37
8	0·98	15	3·53	22	7·85	29	14·34
9	1·24	16	4·02	23	8·64	30	15·47
10	1·55	17	4·56	24	9·47	35	22·07

80 80

Street Centers in OLD TOWN

Return to City Engineers Office
City Hall, San Diego, Cal.

Street Centers in OLD TOWN

Note! — For convenience on this survey Taylor Street is called N & S and Congress Street E & W &c. —

Preliminary

Angle from Congress + Harney B.S. on Harney + Stockton 89°57' L

Cen. Harney to Cen. Twigg on Congress 349.9

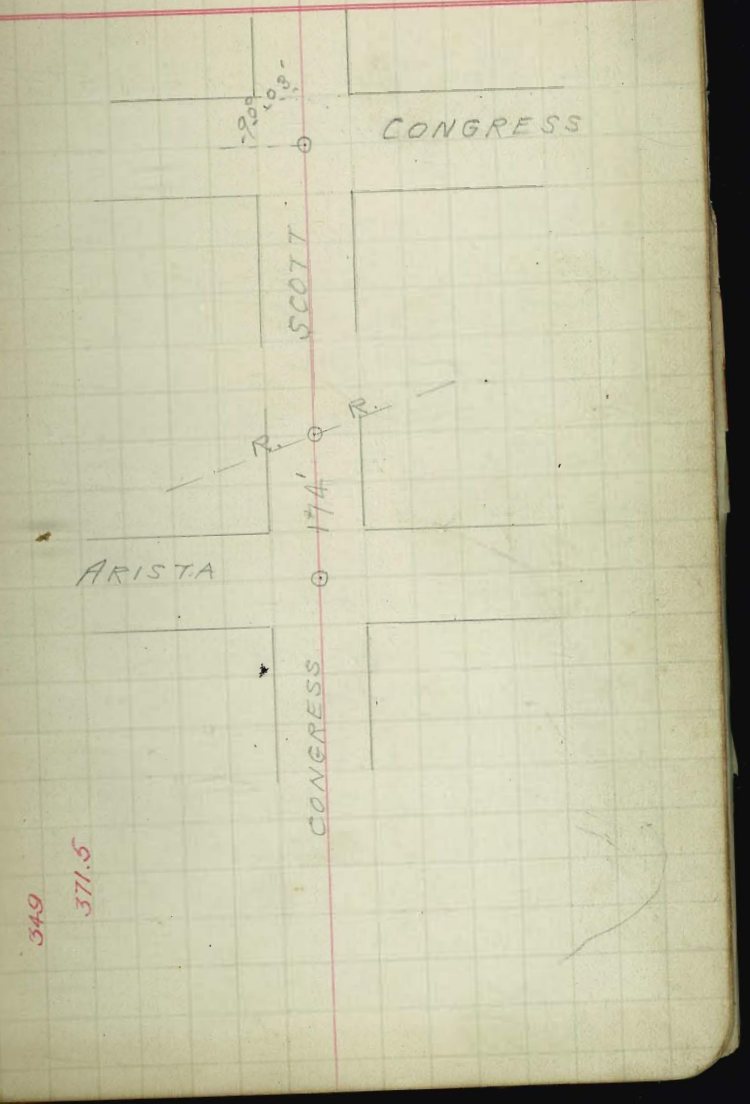
Cen. Twig to Cen. Mason on Congress 349.58

Cen. Mason on Congress to E of Scott 1425.√

Cleanage checked to 1 from Monument on Hickory S of Block 391 to Congress down Scott St.

From Cen. Mason on Congress 750' to Cen. Cal. South Pac. R.R.

From Cen Twigs to Cen. Blank St. 349.81



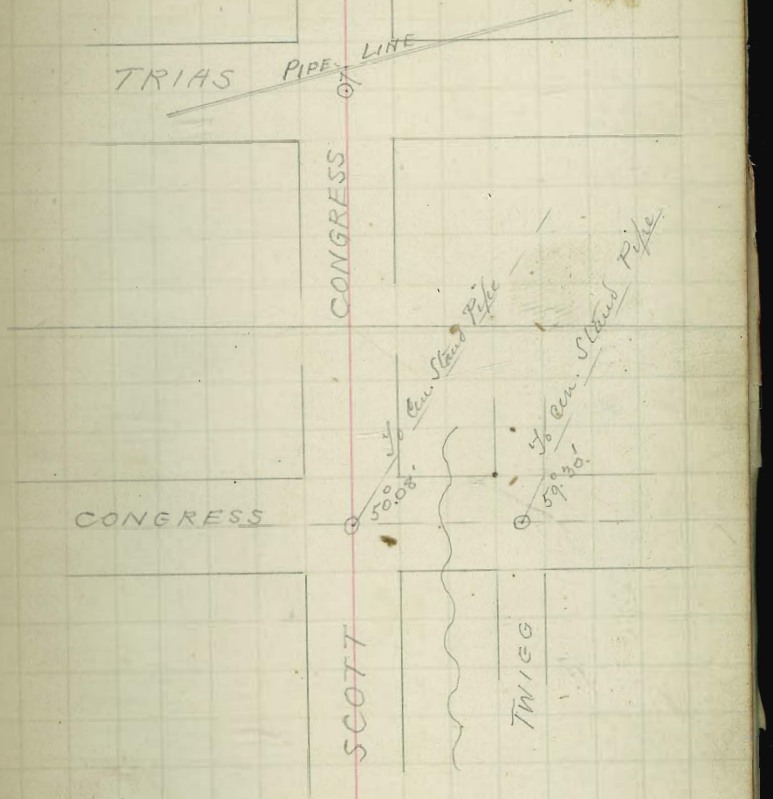
From Cen Blank St. & Property line on Witherby 324.7

From Cen Hancock & prop line on W Bdy - 41°.14'L to Stand Pipe B.S. on Han-

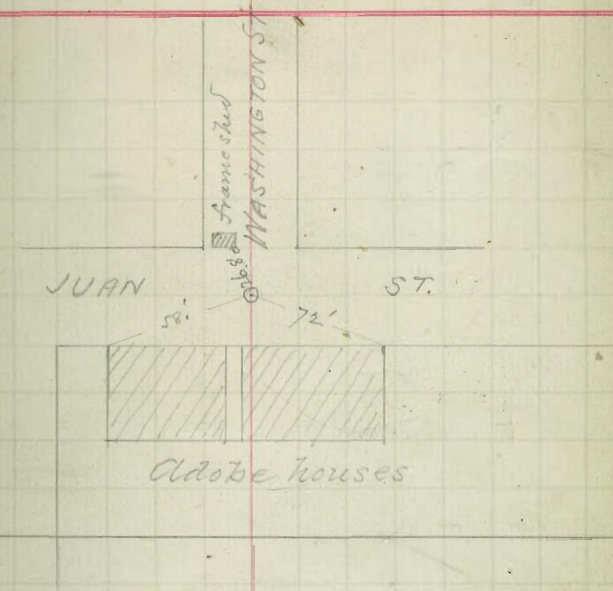
From Cen Hancock & Jackson 7 L on Hancock 55°.05 R to Cen Stand Pipe.

From Cen Jay & Scott Foresight on Jay Edwards Left 45°.54 to Stand pipe

Cen. Scott & Pine foresight N on Scott 90°.11' R to Cen. Stand pipe



Running S. from W Boundary line opposite North side of Hickory



Scott St

From cen. Congress to cen. of Hickory 220.12 ft. angle from Scott to Hickory

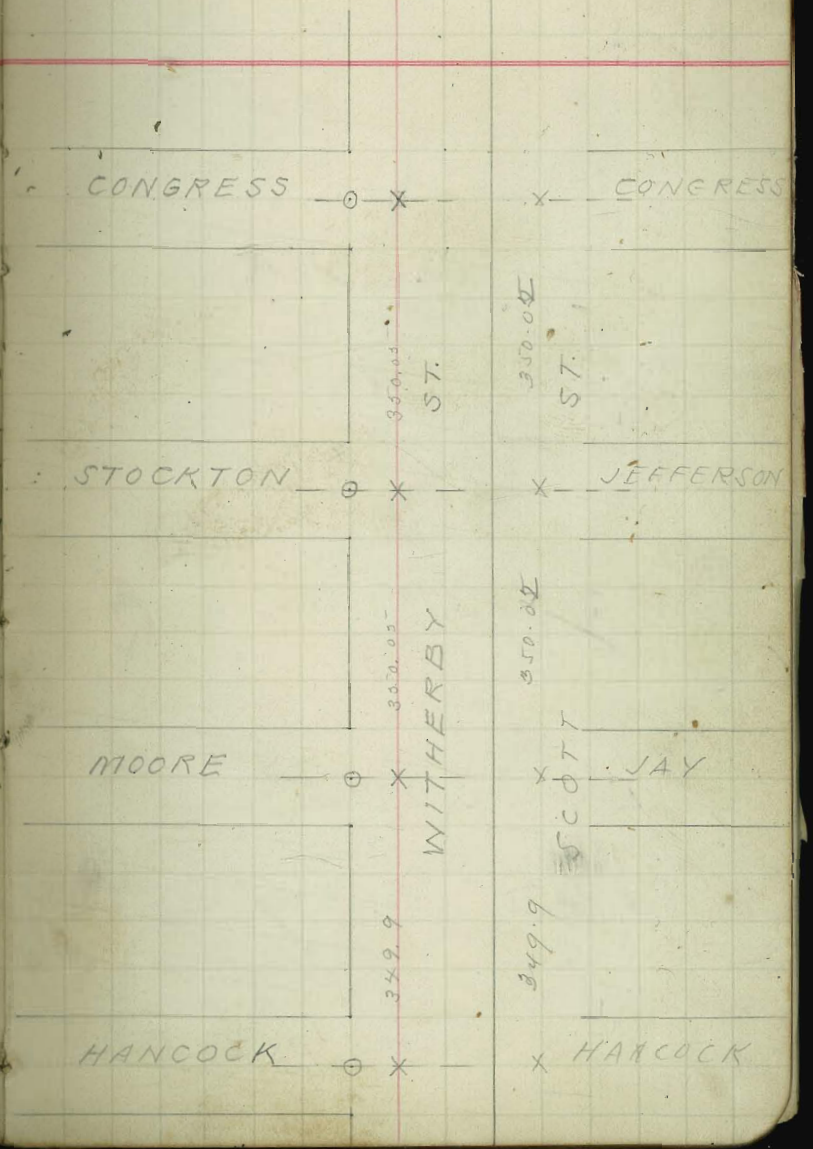
Congress to Jaun on Harney 870.05
angle from Harney to Jaun

Congress to Jaun on Scott 870.08
angle from Jaun to Scott 90° 3

Center of Washington to cen Taylor 587.5. center of Taylor to cen. Scott 374.97 on Jaun st on Webster st, total dist 962.47

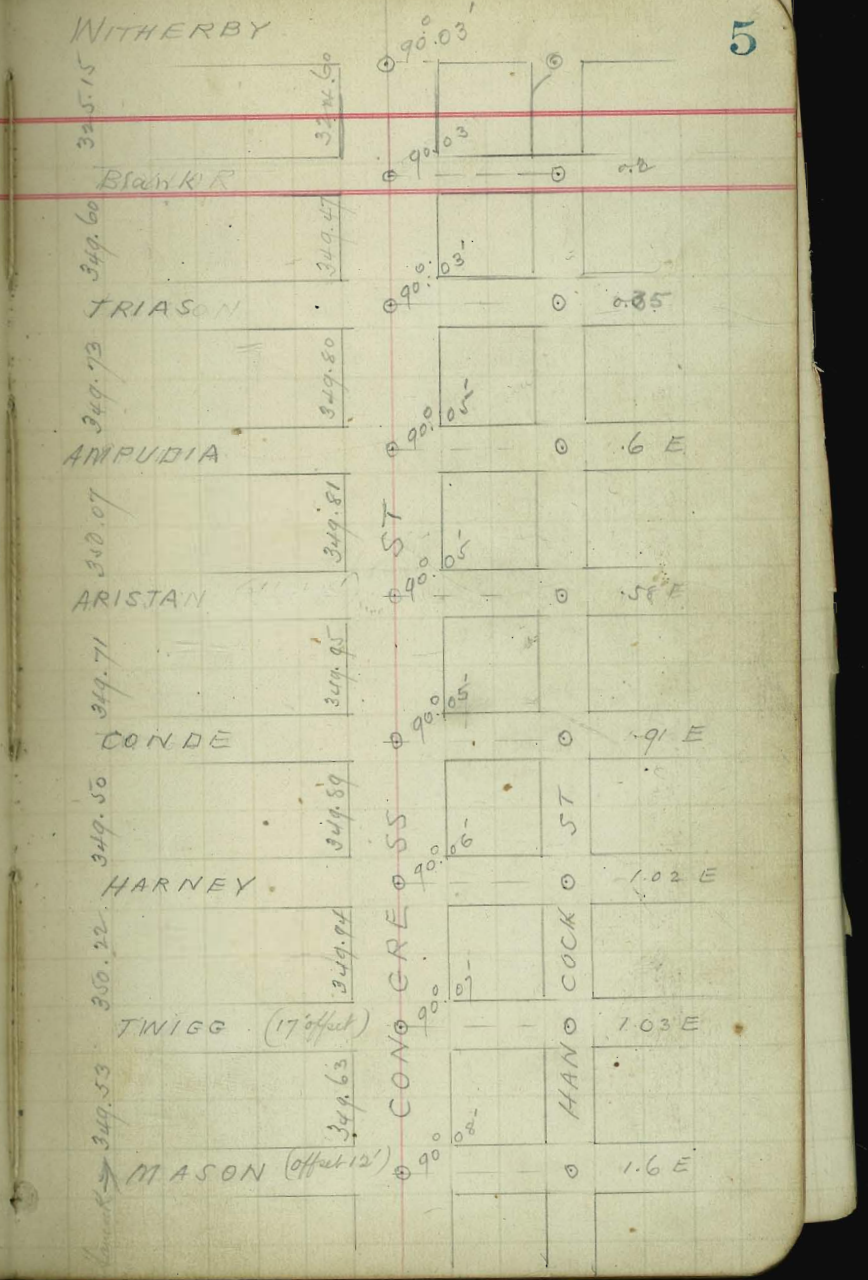
From Monument on N.W. cor. Hickory and Taylor to center line of Scott 324.97

From Taylor to Scott on Chestnut 374.97
" " " " Congress 374.97
any. from Scott to Chestnut 87.97



On Hancock St.

From Prop. line Witherby to Cen Blank 350
" Cen Blank to Cen Trias 349.97
" " Trias - - Ampudia 350
" " Ampudia " " RR Track 101.
" " " " " "
" " " " " Arista 350
" " Arista
" " Arista " " Conde 350
" " Conde " " Harney 350
" " Harney " " Twigg 350
" Twigg " " Mason 350



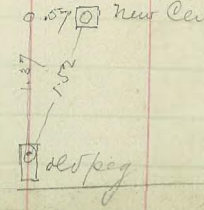
From Cen Mason & Cen Smith 350

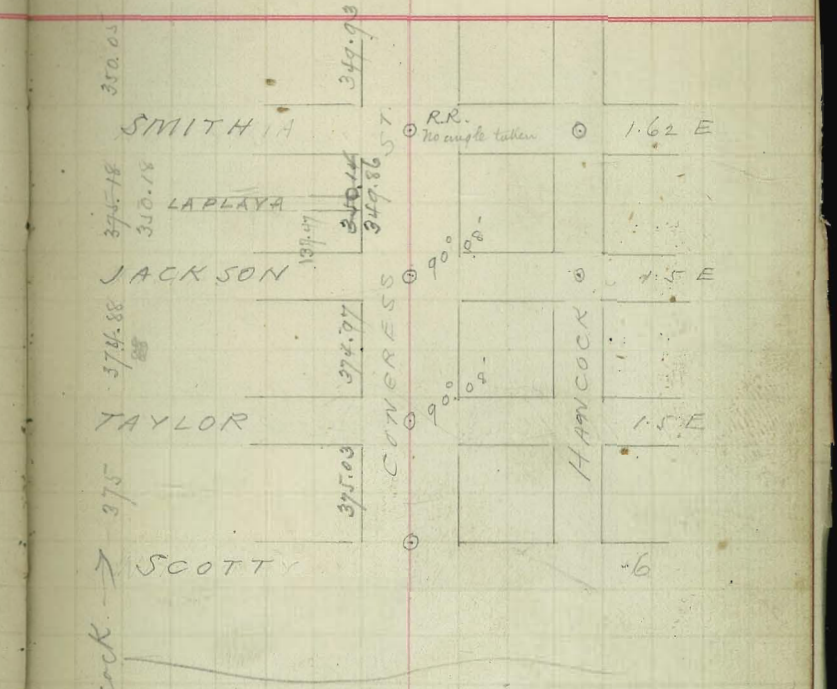
" " Smith " " Jackson 350

" " Jackson " " Taylor 395

" " Taylor " " Scott 373.8

Old Peg 4"x1½" on N Boundary in Juan St. with tack.—





R.R. Intersections. ——

Witherby prop line. 198.7 S of Cen. of Hancock. —

181 W. of Cen. Ampudia & Hancock

152.1 W. of Cen. Harney & Moore

63.1 W of Cen. Twigg & Moore

206.16 W of Cen. Mason & Jay

58.28 W of Cen. Smith & Jefferson

38.18 S of Cen Jackson & Congress

50.3 W. " " " "

100 W of Cen. Gaines & Juan P.B.R.R.

132 " " " " " " to Cal.S.R

From On W. Boundary 132 ft S of Center

Between Blocks 347 & 348, 56.3 "

also 256.3 from same pt.

Center of Pacific Beach R.R.

R.R. Intersections

On Garden Street at RR xing angle with foresight West – = 36°22' R. Cal. Sou. RR

~~Th~~ Taylor & Congress N to Cal. S. R R
D 43.96
Calhoun & Scott S to " " "
Leg: 66

90-00
53 51
36.09

Angle from Twigg thro' Center of Couts St. foresight on Twigg North 93°53' left. Angle taken bet. prop. lines - distance 425.12

Distance from Cen Twigg & Cout to Center Twigg & Juan 288.29

Stadia Readings from 25+12

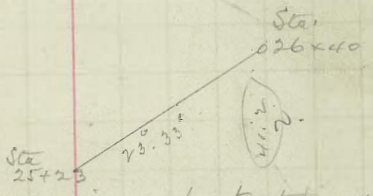
From	To	Horizontal R	Horizontal L	Vert. up	Vert. down	dist
Sta. 25+12	A	86.30		4°.09'		264.
A	B		37.50	0°.33'		171.
B.	C.	38.40			.40'	296.

Station C = Cor Murry Fence

Levels for Bridge Site across San Diego River in Morses Subd: of 1106

Sta	B.S.	H of I.	Int	F.S.	Red Lvs	
B.M.	4.14	54.14			50.00	B.M. on plug in fence line E side of Road opposite sta 7+00
7+00			4.7		49.4	
+12			6.4		47.7	
8			7.1		47.0	
9			6.6		47.5	
10			7.3		46.8	Low ground
11			7.1		47.0	
12			5.0		49.1	
+5			4.9		49.2	River bank proper
13			5.9		48.2	
+5			6.5		47.6	
14			6.9		47.2	
+5			6.6		47.5	
15			7.8		46.3	
+5			7.7		46.4	
16			7.7		46.4	
+5			7.6		46.5	
17			8.2		45.9	
+04			9.4		46.7	River bank North
+50			5.1		49.0	
T.P.				4.64	49.50	on Top of Sta 17+50

Sta	B.S.	H of I	F.S.	T.S.	El.	
	4.34	53.84			49.50	
18			5.5		48.3	
19			5.2		48.6	
20			6.0		47.8	
21			5.4		48.4	
22			5.6		48.2	
+30			6.8		47.0	Edge of small water way
+40			8.5		45.3	bottom
+50			5.6		48.2	top
23			5.3		48.5	
+5			2.9		50.9	
24			3.5		50.3	
25			6.0		47.8	
+73	5.80	53.78		5.86	47.98	T.P.
BM6.				2.43	51.35	BM6 Stadia reading 1.76 to station 26+40
on Bank						



350
6
100
25
2125
1970
155

1
1775
1970
200
155
555

angle from north property line of walnut to S.E. cor 384. dist 25.75 ft

On Garden St. & Scott line produced from San Diego avenue strikes 38 south.

195 – 100 – 225 – 50
350 – 350 – 350 – 350
350
350
350
100
225
50
1970

295
250
545
725
180

350
75
1750
25
1775
1970
200
155
555

350
6
2100
25
2125
1970
155

Table showing amt to be added to tape to make allowance in chaining on slope

Diff in Elevation	Correction	angle				
1'	.005	0° 35'	Sine of 1' = .0002909			
2'	.020	1° 09'	Sine of 1° = .01745 24			
3'	.045	1° 43'				
4'	.081	2° 18'				
5'	.125	2° 52'				
6'	.181	3° 27'				
7'	.246	4° 01'				

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TRAVERSE TABLE FOR TRANSIT BOOK,

From 1° to 90° for a distance of 100.

Return to City Engineers Office
City Hall, San Diego, Cal.

Degrees.	DEGREES.		¼ DEGREE.		½ DEGREE.		¾ DEGREE.		Degrees
	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	
0			100.00	0.44	100.00	0.87	99.99	1.31	89
1	99.98	1.75	99.98	2.18	99.97	2.62	99.95	3.05	88
2	99.94	3.49	99.92	3.93	99.91	4.36	99.88	4.80	87
3	99.86	5.23	99.84	5.67	99.81	6.10	99.79	6.54	86
4	99.76	6.98	99.73	7.41	99.69	7.85	99.66	8.28	85
5	99.62	8.72	99.58	9.15	99.54	9.58	99.50	10.02	84
6	99.45	10.45	99.41	10.89	99.36	11.32	99.31	11.75	83
7	99.25	12.19	99.20	12.62	99.14	13.05	99.09	13.49	82
8	99.03	13.92	98.97	14.35	98.90	14.78	98.84	15.21	81
9	98.77	15.64	98.70	16.07	98.63	16.50	98.56	16.93	80
10	98.48	17.36	98.40	17.79	98.33	18.22	98.25	18.65	79
11	98.16	19.08	98.08	19.51	97.99	19 94	97.90	20.36	78
12	97.81	20.79	97.72	21.22	97.63	21.64	97.53	22.07	77
13	97.44	22.50	97.34	22.92	97.24	23.34	97.13	23.77	76
14	97.03	24.19	96.92	24.62	96.81	25.04	96.70	25.46	75
15	96.59	25.88	96.48	26.30	96.36	26.72	96.25	27.14	74
16	96.13	27.56	96.00	27.98	95.88	28.40	95.76	28.82	73
17	95.63	29.24	95.50	29.65	95.37	30.07	95.24	30.49	72
18	95.11	30.90	94.97	31.32	94.83	31.73	94.69	32.14	71
19	94.55	32.56	94.41	32.97	94.26	33.38	94.12	33.79	70
20	93.97	34.20	93.82	34.61	93.67	35.02	93.51	35.43	69
21	93.36	35.84	93.20	36.24	93.04	36.65	92.88	37.06	68
22	92.72	37.46	92.55	37.86	92.39	38.27	92.22	38.67	67
23	92.05	39.07	91.88	39.47	91.71	39.87	91.53	40.27	66
24	91.35	40.67	91 18	41.07	91.00	41.47	90.81	41.87	65
25	90.63	42.26	90.45	42.66	90 26	43.05	90.07	43 44	64
26	89.88	43.84	89.69	44.23	89.49	44.62	89.30	45.01	63
27	89.10	45.40	88.90	45.79	88.70	46.17	88.50	46.56	62
28	88.29	46.95	88.09	47.33	87.88	47.72	87.67	48.10	61
29	87.46	48.48	87.25	48.86	87.04	49 24	86.82	49.62	60
30	86.60	50.00	86.38	50.38	86.16	50.75	85.94	51.13	59
31	85.72	51.50	85.49	51.88	85.26	52.25	85.04	52.62	58
32	84.80	52.99	84.57	53.36	84.34	53.73	84.10	54.10	57
33	83.87	54.46	83.63	54.83	83.39	55.19	83.15	55.56	56
34	82.90	55.92	82 66	56.28	82.41	56.64	82.16	57.00	55
35	81.92	57.36	81.66	57.71	81.41	58.07	81.16	58.42	54
36	80.90	58.78	80.64	59.13	80.39	59.48	80.13	59.83	53
37	79.86	60.18	79.60	60.53	79.34	60.88	79.07	61.22	52
38	78.80	61.57	78.53	61.91	78 26	62.25	77.99	62.59	51
39	77.71	62.93	77.44	63.27	77.16	63.61	76.88	63.94	50
40	76.60	64.28	76.32	64.61	76.04	64.94	75.76	65.28	49
41	75.47	65.61	75.18	65.93	74.90	66.26	74.61	66.59	48
42	74.31	66.91	74.02	67.24	73.73	67.56	73.43	67 88	47
43	73.14	68.20	72.84	68.52	72.54	68.84	72.24	69.15	46
44	71.93	69.47	71.63	69.78	71.33	70.09	71.02	70.40	45
45	70.71	70.71							
Degrees.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Degrees.
	DEGREES.		¾ DEGREE.		½ DEGREE.		¼ DEGREE.		

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