

13 SMA-Queretaro ruta puntos X Y

Vértice	X	Y	Angulo	Distancia Acumulada (m)
0	319,087.97	2,313,675.20	175.29	0.00
1	319,092.32	2,313,622.36	171.95	53.02
2	319,114.05	2,313,514.55	172.64	163.00
3	319,116.97	2,313,464.26	173.12	213.38
4	319,124.26	2,313,424.72	164.48	253.59
5	319,147.60	2,313,362.59	162.00	319.96
6	319,165.12	2,313,298.99	172.56	385.92
7	319,164.87	2,313,271.04	183.78	413.87
8	319,160.79	2,313,238.08	187.09	447.08
9	319,156.26	2,313,201.89	185.80	483.55
10	319,153.95	2,313,172.35	182.85	513.18
11	319,153.45	2,313,148.84	177.39	536.70
12	319,156.04	2,313,125.90	173.11	559.79
13	319,159.80	2,313,096.60	170.05	589.33
14	319,165.25	2,313,072.19	167.79	614.34
15	319,171.01	2,313,044.71	168.27	642.41
16	319,173.73	2,313,031.48	166.06	655.92
17	319,177.28	2,313,019.33	162.02	668.58
18	319,184.08	2,313,000.35	155.32	688.74
19	319,196.44	2,312,978.62	147.69	713.74
20	319,209.66	2,312,959.72	139.47	736.81
21	319,217.61	2,312,952.06	137.43	747.84
22	319,295.76	2,312,855.74	138.26	871.88
23	319,303.61	2,312,847.73	133.01	883.09
24	319,313.25	2,312,839.52	127.15	895.76
25	319,388.36	2,312,789.13	118.71	986.21
26	319,631.17	2,312,683.26	112.06	1,251.09
27	319,658.42	2,312,673.03	98.97	1,280.20
28	319,678.35	2,312,673.94	83.31	1,300.15
29	319,853.42	2,312,707.18	81.80	1,478.35
30	319,938.10	2,312,715.56	87.88	1,563.45
31	320,192.43	2,312,709.32	94.19	1,817.84
32	320,586.19	2,312,661.21	98.30	2,214.53
33	321,272.12	2,312,544.86	98.14	2,910.26
34	321,375.76	2,312,532.77	100.72	3,014.61
35	321,473.81	2,312,506.91	107.00	3,116.01
36	321,669.73	2,312,438.63	112.46	3,323.49
37	321,704.47	2,312,421.90	112.96	3,362.04
38	321,896.27	2,312,351.32	106.17	3,566.42
39	322,122.78	2,312,302.60	99.88	3,798.11
40	326,656.43	2,311,695.61	98.93	8,372.21
41	326,763.66	2,311,676.23	103.25	8,481.18
42	326,869.99	2,311,645.21	108.62	8,591.94
43	329,218.07	2,310,744.70	107.81	11,106.78
44	329,289.17	2,310,726.13	102.23	11,180.26
45	329,373.22	2,310,711.58	97.23	11,265.56
46	329,451.47	2,310,705.24	94.91	11,344.07
47	333,086.20	2,310,374.57	96.37	14,993.81
48	333,102.67	2,310,372.39	97.79	15,010.42
49	333,132.40	2,310,368.18	98.91	15,040.45
50	333,164.96	2,310,362.57	101.25	15,073.49
51	333,200.88	2,310,354.47	105.42	15,110.31

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Vértice	X	Y	Angulo	Distancia Acumulada (m)
52	333,405.81	2,310,287.37	107.47	15,325.95
53	333,439.46	2,310,277.20	103.87	15,361.09
54	333,495.29	2,310,266.41	98.99	15,417.96
55	333,678.38	2,310,243.81	96.57	15,602.44
56	333,678.38	2,310,243.81	95.93	15,602.44
57	338,786.33	2,309,728.37	100.32	20,736.33
58	338,859.66	2,309,708.89	103.88	20,812.20
59	338,948.08	2,309,688.69	145.54	20,902.90
60	338,945.47	2,309,670.61	159.15	20,921.17
61	339,044.90	2,309,586.93	130.19	21,051.13
62	339,244.44	2,309,417.69	124.50	21,312.77
63	339,274.96	2,309,400.97	115.67	21,347.57
64	339,360.98	2,309,365.10	117.12	21,440.78
65	339,444.39	2,309,313.77	121.84	21,538.71
66	339,538.43	2,309,254.83	119.48	21,649.69
67	339,616.51	2,309,215.24	74.59	21,737.23
68	339,629.09	2,309,235.14	49.63	21,760.77
69	339,639.62	2,309,239.63	92.98	21,772.22
70	339,657.70	2,309,229.61	124.83	21,792.89
71	339,657.70	2,309,229.61	130.09	21,792.89
72	340,221.60	2,308,764.41	126.42	22,523.91
73	340,256.07	2,308,741.75	122.26	22,565.16
74	340,295.24	2,308,718.03	118.36	22,610.95
75	340,649.58	2,308,548.88	116.69	23,003.60
76	340,716.16	2,308,513.68	120.57	23,078.91
77	340,735.71	2,308,500.85	125.69	23,102.29
78	340,756.82	2,308,484.28	131.05	23,129.13
79	340,782.16	2,308,459.84	138.82	23,164.34
80	340,802.98	2,308,431.53	145.81	23,199.48
81	340,827.63	2,308,392.16	149.78	23,245.93
82	340,873.56	2,308,307.21	152.81	23,342.50
83	340,890.29	2,308,272.89	153.85	23,380.68
84	340,914.11	2,308,224.72	155.03	23,434.42
85	340,936.23	2,308,174.14	154.76	23,489.62
86	340,936.23	2,308,174.14	158.06	23,489.62
87	340,966.54	2,308,075.10	164.31	23,593.20
88	341,072.47	2,307,661.34	166.44	24,020.30
89	341,082.79	2,307,615.71	167.38	24,067.09
90	341,092.58	2,307,571.48	169.70	24,112.38
91	341,101.74	2,307,507.28	176.21	24,177.23
92	341,101.74	2,307,507.28	177.22	24,177.23
93	341,109.39	2,307,435.82	176.74	24,249.10
94	341,109.85	2,307,372.14	181.10	24,312.79
95	341,098.14	2,307,116.74	182.12	24,568.46
96	341,097.27	2,307,085.93	180.99	24,599.28
97	341,096.98	2,307,038.59	177.21	24,646.62
98	341,103.11	2,306,979.61	172.13	24,705.91
99	341,110.32	2,306,937.88	164.84	24,748.26
100	341,133.26	2,306,876.57	162.29	24,813.73
101	341,133.26	2,306,876.57	165.44	24,813.73
102	341,133.37	2,306,876.15	158.02	24,814.16
103	341,163.06	2,306,824.23	147.30	24,873.97

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Vértice	X	Y	Angulo	Distancia Acumulada (m)
104	341,189.51	2,306,787.33	141.59	24,919.36
105	341,207.11	2,306,767.21	136.38	24,946.10
106	341,207.11	2,306,767.21	135.02	24,946.10
107	341,225.41	2,306,748.18	135.89	24,972.50
108	341,380.14	2,306,589.80	134.93	25,193.92
109	341,469.85	2,306,502.57	130.89	25,319.05
110	341,543.52	2,306,445.86	124.26	25,412.01
111	341,598.41	2,306,412.97	121.87	25,476.00
112	341,598.41	2,306,412.97	120.59	25,476.00
113	341,619.90	2,306,401.37	116.72	25,500.43
114	341,668.69	2,306,378.54	113.03	25,554.29
115	341,748.21	2,306,348.05	108.38	25,639.46
116	341,791.77	2,306,335.73	104.21	25,684.73
117	341,829.76	2,306,327.22	99.97	25,723.66
118	341,886.70	2,306,319.91	95.11	25,781.06
119	341,919.16	2,306,318.27	89.82	25,813.57
120	341,991.87	2,306,322.42	83.95	25,886.40
121	342,035.03	2,306,329.12	81.54	25,930.07
122	342,067.57	2,306,333.75	79.58	25,962.94
123	342,114.54	2,306,344.37	77.74	26,011.09
124	342,581.57	2,306,441.68	81.47	26,488.15
125	342,621.44	2,306,445.37	86.80	26,528.20
126	342,644.55	2,306,445.82	91.57	26,551.31
127	342,669.16	2,306,443.99	97.23	26,575.99
128	342,705.71	2,306,437.42	102.10	26,613.12
129	342,859.82	2,306,398.95	104.17	26,771.96
130	342,859.82	2,306,398.95	104.14	26,771.96
131	342,885.51	2,306,392.57	104.14	26,798.43
132	342,885.51	2,306,392.57	104.14	26,798.43
133	342,911.20	2,306,386.19	104.14	26,824.91
134	342,911.20	2,306,386.19	105.34	26,824.91
135	343,088.95	2,306,334.03	104.45	27,010.15
136	343,088.95	2,306,334.03	102.55	27,010.15