

# New Best-So-Far Solutions for benchmark of Golden et al. (Capacitated VRP)

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Table 1

New best solution for instance `gol-n484-k19`.

Number of routes		19
Total solution distance		1126.3787959323201
Route 1	Capacity	900
	Distance	5.656854249492381
	Visited customers	1 3 0
Route 2	Capacity	987
	Distance	86.88151520745208
	Visited customers	158, 176, 195, 215, 236, 258, 278, 297, 315, 296, 314, 332, 349, 379, 392, 405, 417, 428, 438, 429, 418, 406, 393, 365, 350, 333, 316, 334, 317, 298, 279, 259, 237, 216, 196, 177, 141
Route 3	Capacity	999
	Distance	69.22697000117347
	Visited customers	97, 144, 180, 200, 242, 263, 284, 303, 322, 339, 355, 370, 384, 398, 385, 371, 356, 340, 323, 305, 286, 244, 222, 182, 163, 145, 128, 84
Route 4	Capacity	998
	Distance	105.24299193448232
	Visited customers	184, 204, 225, 247, 269, 290, 309, 327, 345, 361, 377, 391, 404, 416, 427, 437, 446, 454, 461, 467, 472, 476, 479, 481, 482, 480, 477, 473, 469, 464, 457, 449, 441, 450, 442, 432, 421, 397, 383, 369, 354, 337, 301
Route 5	Capacity	987
	Distance	88.8254711960296
	Visited customers	125, 159, 217, 238, 280, 299, 318, 335, 351, 366, 380, 394, 407, 419, 430, 439, 447, 455, 462, 468, 463, 456, 448, 440, 431, 420, 408, 395, 381, 367, 352, 336, 281, 218, 198, 160
Route 6	Capacity	992
	Distance	76.41383070942005
	Visited customers	98, 113, 129, 146, 164, 183, 223, 245, 267, 288, 307, 325, 343, 359, 375, 389, 402, 415, 403, 390, 376, 360, 344, 326, 308, 289, 268, 246, 224, 203, 165, 147, 130, 114
Route 7	Capacity	1000
	Distance	57.94717000373346
	Visited customers	41, 62, 100, 115, 131, 148, 166, 185, 205, 226, 248, 270, 249, 227, 206, 186, 167, 149, 132, 117, 102, 88, 75, 63, 52, 34, 26
Route 8	Capacity	954
	Distance	32.67190752911256
	Visited customers	33, 42, 51, 61, 73, 86, 99, 85, 72, 60, 50, 40, 31, 17

Table 2

New best solution for instance `gol-n484-k19` (continues from Table 1).

Route 9	Capacity	979
	Distance	18.614271578730534
	Visited customers	4, 8, 13, 19, 25, 32, 24, 18, 12
Route 10	Capacity	996
	Distance	14.809836694575331
	Visited customers	6, 10, 15, 22, 16, 11, 7
Route 11	Capacity	1000
	Distance	78.6422932534329
	Visited customers	68, 80, 93, 107, 122, 138, 155, 173, 192, 212, 233, 255, 295, 313, 331, 348, 364, 378, 363, 347, 330, 312, 293, 274, 294, 275, 254, 232, 211, 191, 172, 154, 120, 77, 65, 54
Route 12	Capacity	982
	Distance	100.303155876727
	Visited customers	201, 243, 265, 324, 341, 373, 387, 400, 412, 424, 435, 444, 452, 459, 451, 458, 465, 470, 474, 478, 475, 471, 466, 460, 453, 445, 436, 426, 414, 425, 413, 401, 388, 374, 358, 342, 306, 287, 266, 202
Route 13	Capacity	991
	Distance	57.88275570081588
	Visited customers	96, 126, 143, 179, 219, 240, 261, 282, 302, 320, 338, 321, 283, 262, 241, 220, 199, 161, 127, 111, 83, 71
Route 14	Capacity	991
	Distance	29.17212229196796
	Visited customers	23, 30, 39, 49, 59, 70, 82, 69, 58, 48, 38, 29
Route 15	Capacity	993
	Distance	78.89309781526053
	Visited customers	110, 142, 178, 197, 239, 260, 300, 319, 353, 368, 382, 396, 409, 410, 422, 433, 443, 434, 423, 411, 399, 386, 372, 357, 304, 285, 264, 221, 181, 162, 112
Route 16	Capacity	980
	Distance	66.11407192467243
	Visited customers	55, 66, 78, 91, 105, 90, 104, 119, 135, 152, 170, 189, 209, 230, 252, 273, 253, 231, 210, 190, 171, 153, 136, 137, 121, 106, 92, 79, 67, 56, 46
Route 17	Capacity	996
	Distance	58.129589700339274
	Visited customers	47, 95, 109, 124, 140, 157, 175, 194, 214, 235, 257, 277, 276, 256, 234, 213, 193, 174, 156, 139, 123, 108, 94, 81, 57, 37
Route 18	Capacity	997
	Distance	74.76922496549743
	Visited customers	74, 87, 101, 116, 133, 150, 168, 187, 207, 228, 250, 271, 291, 310, 328, 362, 346, 329, 311, 292, 272, 251, 229, 208, 188, 169, 151, 134, 118, 103, 89, 76, 64, 53, 43
Route 19	Capacity	979
	Distance	26.181665299405125
	Visited customers	2, 5, 9, 14, 20, 27, 35, 44, 45, 36, 28, 21