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In[7]:= Table[{
  winkel1 = (Pi / 2 - a) * 180 / Pi,
  winkel2 = If[a <= Pi / 2,
    (Pi / 2 + a) * 180 / Pi,
    (-Pi - (Pi / 2 - a)) * 180 / Pi
  ],
  100 * (a / Pi - Cos[a] Sin[a] / Pi),
  x1 = r - r * Sin[a],
  y1 = r + r * Cos[a],
  x2 = r + r * Sin[a],
  y2 = r + r * Cos[a]
} // N,
{a, 0, Pi, Pi / 180}];
TableForm[%, TableHeadings -> {
  None,
  {"winkel1[°]", "winkel2[°]", "Flächenanteil in %", "x1", "y1", "x2", "y2"}
}]

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Out[8]//TableForm=

winkel1[°]	winkel2[°]	Flächenanteil in %	x1	y1	x2	y2
90.	90.	0.	r	2. r	r	2. r
89.	91.	0.000112814	0.982548 r	1.99985 r	1.01745 r	1.99985 r
88.	92.	0.00090235	0.965101 r	1.99939 r	1.0349 r	1.99939 r
87.	93.	0.0030445	0.947664 r	1.99863 r	1.05234 r	1.99863 r
86.	94.	0.00721353	0.930244 r	1.99756 r	1.06976 r	1.99756 r
85.	95.	0.0140812	0.912844 r	1.99619 r	1.08716 r	1.99619 r
84.	96.	0.024316	0.895472 r	1.99452 r	1.10453 r	1.99452 r
83.	97.	0.0385823	0.878131 r	1.99255 r	1.12187 r	1.99255 r
82.	98.	0.0575397	0.860827 r	1.99027 r	1.13917 r	1.99027 r
81.	99.	0.0818418	0.843566 r	1.98769 r	1.15643 r	1.98769 r
80.	100.	0.112136	0.826352 r	1.98481 r	1.17365 r	1.98481 r
79.	101.	0.149062	0.809191 r	1.98163 r	1.19081 r	1.98163 r
78.	102.	0.193252	0.792088 r	1.97815 r	1.20791 r	1.97815 r
77.	103.	0.245329	0.775049 r	1.97437 r	1.22495 r	1.97437 r
76.	104.	0.305906	0.758078 r	1.9703 r	1.24192 r	1.9703 r
75.	105.	0.375586	0.741181 r	1.96593 r	1.25882 r	1.96593 r
74.	106.	0.454962	0.724363 r	1.96126 r	1.27564 r	1.96126 r
73.	107.	0.544613	0.707628 r	1.9563 r	1.29237 r	1.9563 r
72.	108.	0.645107	0.690983 r	1.95106 r	1.30902 r	1.95106 r
71.	109.	0.756999	0.674432 r	1.94552 r	1.32557 r	1.94552 r

70.	110.	0.880829	0.65798 r	1.93969 r	1.34202 r	1.93969 r
69.	111.	1.01712	0.641632 r	1.93358 r	1.35837 r	1.93358 r
68.	112.	1.16639	0.625393 r	1.92718 r	1.37461 r	1.92718 r
67.	113.	1.32913	0.609269 r	1.9205 r	1.39073 r	1.9205 r
66.	114.	1.50582	0.593263 r	1.91355 r	1.40674 r	1.91355 r
65.	115.	1.69691	0.577382 r	1.90631 r	1.42262 r	1.90631 r
64.	116.	1.90286	0.561629 r	1.89879 r	1.43837 r	1.89879 r
63.	117.	2.12409	0.54601 r	1.89101 r	1.45399 r	1.89101 r
62.	118.	2.36101	0.530528 r	1.88295 r	1.46947 r	1.88295 r
61.	119.	2.61401	0.51519 r	1.87462 r	1.48481 r	1.87462 r
60.	120.	2.88344	0.5 r	1.86603 r	1.5 r	1.86603 r
59.	121.	3.16967	0.484962 r	1.85717 r	1.51504 r	1.85717 r
58.	122.	3.47303	0.470081 r	1.84805 r	1.52992 r	1.84805 r
57.	123.	3.79381	0.455361 r	1.83867 r	1.54464 r	1.83867 r
56.	124.	4.1323	0.440807 r	1.82904 r	1.55919 r	1.82904 r
55.	125.	4.48877	0.426424 r	1.81915 r	1.57358 r	1.81915 r
54.	126.	4.86347	0.412215 r	1.80902 r	1.58779 r	1.80902 r
53.	127.	5.2566	0.398185 r	1.79864 r	1.60182 r	1.79864 r
52.	128.	5.66838	0.384339 r	1.78801 r	1.61566 r	1.78801 r
51.	129.	6.09896	0.37068 r	1.77715 r	1.62932 r	1.77715 r
50.	130.	6.54852	0.357212 r	1.76604 r	1.64279 r	1.76604 r
49.	131.	7.01717	0.343941 r	1.75471 r	1.65606 r	1.75471 r
48.	132.	7.50503	0.330869 r	1.74314 r	1.66913 r	1.74314 r
47.	133.	8.01216	0.318002 r	1.73135 r	1.682 r	1.73135 r
46.	134.	8.53865	0.305342 r	1.71934 r	1.69466 r	1.71934 r
45.	135.	9.08451	0.292893 r	1.70711 r	1.70711 r	1.70711 r
44.	136.	9.64976	0.28066 r	1.69466 r	1.71934 r	1.69466 r
43.	137.	10.2344	0.268646 r	1.682 r	1.73135 r	1.682 r
42.	138.	10.8384	0.256855 r	1.66913 r	1.74314 r	1.66913 r
41.	139.	11.4616	0.24529 r	1.65606 r	1.75471 r	1.65606 r
40.	140.	12.1041	0.233956 r	1.64279 r	1.76604 r	1.64279 r
39.	141.	12.7656	0.222854 r	1.62932 r	1.77715 r	1.62932 r
38.	142.	13.4462	0.211989 r	1.61566 r	1.78801 r	1.61566 r
37.	143.	14.1455	0.201364 r	1.60182 r	1.79864 r	1.60182 r
36.	144.	14.8635	0.190983 r	1.58779 r	1.80902 r	1.58779 r
35.	145.	15.5999	0.180848 r	1.57358 r	1.81915 r	1.57358 r
34.	146.	16.3545	0.170962 r	1.55919 r	1.82904 r	1.55919 r
33.	147.	17.1271	0.161329 r	1.54464 r	1.83867 r	1.54464 r
32.	148.	17.9175	0.151952 r	1.52992 r	1.84805 r	1.52992 r
31.	149.	18.7252	0.142833 r	1.51504 r	1.85717 r	1.51504 r
30.	150.	19.5501	0.133975 r	1.5 r	1.86603 r	1.5 r

29.	151.	20.3918	0.12538 r	1.48481 r	1.87462 r	1.48481 r
28.	152.	21.2499	0.117052 r	1.46947 r	1.88295 r	1.46947 r
27.	153.	22.1241	0.108993 r	1.45399 r	1.89101 r	1.45399 r
26.	154.	23.014	0.101206 r	1.43837 r	1.89879 r	1.43837 r
25.	155.	23.9191	0.0936922 r	1.42262 r	1.90631 r	1.42262 r
24.	156.	24.8391	0.0864545 r	1.40674 r	1.91355 r	1.40674 r
23.	157.	25.7736	0.0794951 r	1.39073 r	1.9205 r	1.39073 r
22.	158.	26.7219	0.0728161 r	1.37461 r	1.92718 r	1.37461 r
21.	159.	27.6838	0.0664196 r	1.35837 r	1.93358 r	1.35837 r
20.	160.	28.6586	0.0603074 r	1.34202 r	1.93969 r	1.34202 r
19.	161.	29.6459	0.0544814 r	1.32557 r	1.94552 r	1.32557 r
18.	162.	30.6451	0.0489435 r	1.30902 r	1.95106 r	1.30902 r
17.	163.	31.6557	0.0436952 r	1.29237 r	1.9563 r	1.29237 r
16.	164.	32.6772	0.0387383 r	1.27564 r	1.96126 r	1.27564 r
15.	165.	33.7089	0.0340742 r	1.25882 r	1.96593 r	1.25882 r
14.	166.	34.7504	0.0297043 r	1.24192 r	1.9703 r	1.24192 r
13.	167.	35.8009	0.0256299 r	1.22495 r	1.97437 r	1.22495 r
12.	168.	36.8599	0.0218524 r	1.20791 r	1.97815 r	1.20791 r
11.	169.	37.9268	0.0183728 r	1.19081 r	1.98163 r	1.19081 r
10.	170.	39.001	0.0151922 r	1.17365 r	1.98481 r	1.17365 r
9.	171.	40.0818	0.0123117 r	1.15643 r	1.98769 r	1.15643 r
8.	172.	41.1687	0.00973193 r	1.13917 r	1.99027 r	1.13917 r
7.	173.	42.2608	0.00745385 r	1.12187 r	1.99255 r	1.12187 r
6.	174.	43.3576	0.0054781 r	1.10453 r	1.99452 r	1.10453 r
5.	175.	44.4585	0.0038053 r	1.08716 r	1.99619 r	1.08716 r
4.	176.	45.5628	0.00243595 r	1.06976 r	1.99756 r	1.06976 r
3.	177.	46.6697	0.00137047 r	1.05234 r	1.99863 r	1.05234 r
2.	178.	47.7787	0.000609173 r	1.0349 r	1.99939 r	1.0349 r
1.	179.	48.889	0.000152305 r	1.01745 r	1.99985 r	1.01745 r
0.	180.	50.	0.	r	2. r	r
-1.	-179.	51.111	0.000152305 r	0.982548 r	1.99985 r	0.982548 r
-2.	-178.	52.2213	0.000609173 r	0.965101 r	1.99939 r	0.965101 r
-3.	-177.	53.3303	0.00137047 r	0.947664 r	1.99863 r	0.947664 r
-4.	-176.	54.4372	0.00243595 r	0.930244 r	1.99756 r	0.930244 r
-5.	-175.	55.5415	0.0038053 r	0.912844 r	1.99619 r	0.912844 r
-6.	-174.	56.6424	0.0054781 r	0.895472 r	1.99452 r	0.895472 r
-7.	-173.	57.7392	0.00745385 r	0.878131 r	1.99255 r	0.878131 r
-8.	-172.	58.8313	0.00973193 r	0.860827 r	1.99027 r	0.860827 r
-9.	-171.	59.9182	0.0123117 r	0.843566 r	1.98769 r	0.843566 r
-10.	-170.	60.999	0.0151922 r	0.826352 r	1.98481 r	0.826352 r
-11.	-169.	62.0732	0.0183728 r	0.809191 r	1.98163 r	0.809191 r

-12.	-168.	63.1401	0.0218524 r	0.792088 r	1.97815 r	0.792088 r
-13.	-167.	64.1991	0.0256299 r	0.775049 r	1.97437 r	0.775049 r
-14.	-166.	65.2496	0.0297043 r	0.758078 r	1.9703 r	0.758078 r
-15.	-165.	66.2911	0.0340742 r	0.741181 r	1.96593 r	0.741181 r
-16.	-164.	67.3228	0.0387383 r	0.724363 r	1.96126 r	0.724363 r
-17.	-163.	68.3443	0.0436952 r	0.707628 r	1.9563 r	0.707628 r
-18.	-162.	69.3549	0.0489435 r	0.690983 r	1.95106 r	0.690983 r
-19.	-161.	70.3541	0.0544814 r	0.674432 r	1.94552 r	0.674432 r
-20.	-160.	71.3414	0.0603074 r	0.65798 r	1.93969 r	0.65798 r
-21.	-159.	72.3162	0.0664196 r	0.641632 r	1.93358 r	0.641632 r
-22.	-158.	73.2781	0.0728161 r	0.625393 r	1.92718 r	0.625393 r
-23.	-157.	74.2264	0.0794951 r	0.609269 r	1.9205 r	0.609269 r
-24.	-156.	75.1609	0.0864545 r	0.593263 r	1.91355 r	0.593263 r
-25.	-155.	76.0809	0.0936922 r	0.577382 r	1.90631 r	0.577382 r
-26.	-154.	76.986	0.101206 r	0.561629 r	1.89879 r	0.561629 r
-27.	-153.	77.8759	0.108993 r	0.54601 r	1.89101 r	0.54601 r
-28.	-152.	78.7501	0.117052 r	0.530528 r	1.88295 r	0.530528 r
-29.	-151.	79.6082	0.12538 r	0.51519 r	1.87462 r	0.51519 r
-30.	-150.	80.4499	0.133975 r	0.5 r	1.86603 r	0.5 r
-31.	-149.	81.2748	0.142833 r	0.484962 r	1.85717 r	0.484962 r
-32.	-148.	82.0825	0.151952 r	0.470081 r	1.84805 r	0.470081 r
-33.	-147.	82.8729	0.161329 r	0.455361 r	1.83867 r	0.455361 r
-34.	-146.	83.6455	0.170962 r	0.440807 r	1.82904 r	0.440807 r
-35.	-145.	84.4001	0.180848 r	0.426424 r	1.81915 r	0.426424 r
-36.	-144.	85.1365	0.190983 r	0.412215 r	1.80902 r	0.412215 r
-37.	-143.	85.8545	0.201364 r	0.398185 r	1.79864 r	0.398185 r
-38.	-142.	86.5538	0.211989 r	0.384339 r	1.78801 r	0.384339 r
-39.	-141.	87.2344	0.222854 r	0.37068 r	1.77715 r	0.37068 r
-40.	-140.	87.8959	0.233956 r	0.357212 r	1.76604 r	0.357212 r
-41.	-139.	88.5384	0.24529 r	0.343941 r	1.75471 r	0.343941 r
-42.	-138.	89.1616	0.256855 r	0.330869 r	1.74314 r	0.330869 r
-43.	-137.	89.7656	0.268646 r	0.318002 r	1.73135 r	0.318002 r
-44.	-136.	90.3502	0.28066 r	0.305342 r	1.71934 r	0.305342 r
-45.	-135.	90.9155	0.292893 r	0.292893 r	1.70711 r	0.292893 r
-46.	-134.	91.4614	0.305342 r	0.28066 r	1.69466 r	0.28066 r
-47.	-133.	91.9878	0.318002 r	0.268646 r	1.682 r	0.268646 r
-48.	-132.	92.495	0.330869 r	0.256855 r	1.66913 r	0.256855 r
-49.	-131.	92.9828	0.343941 r	0.24529 r	1.65606 r	0.24529 r
-50.	-130.	93.4515	0.357212 r	0.233956 r	1.64279 r	0.233956 r
-51.	-129.	93.901	0.37068 r	0.222854 r	1.62932 r	0.222854 r
-52.	-128.	94.3316	0.384339 r	0.211989 r	1.61566 r	0.211989 r

-53.	-127.	94.7434	0.398185 r	0.201364 r	1.60182 r	0.201364 r
-54.	-126.	95.1365	0.412215 r	0.190983 r	1.58779 r	0.190983 r
-55.	-125.	95.5112	0.426424 r	0.180848 r	1.57358 r	0.180848 r
-56.	-124.	95.8677	0.440807 r	0.170962 r	1.55919 r	0.170962 r
-57.	-123.	96.2062	0.455361 r	0.161329 r	1.54464 r	0.161329 r
-58.	-122.	96.527	0.470081 r	0.151952 r	1.52992 r	0.151952 r
-59.	-121.	96.8303	0.484962 r	0.142833 r	1.51504 r	0.142833 r
-60.	-120.	97.1166	0.5 r	0.133975 r	1.5 r	0.133975 r
-61.	-119.	97.386	0.51519 r	0.12538 r	1.48481 r	0.12538 r
-62.	-118.	97.639	0.530528 r	0.117052 r	1.46947 r	0.117052 r
-63.	-117.	97.8759	0.54601 r	0.108993 r	1.45399 r	0.108993 r
-64.	-116.	98.0971	0.561629 r	0.101206 r	1.43837 r	0.101206 r
-65.	-115.	98.3031	0.577382 r	0.0936922 r	1.42262 r	0.0936922 r
-66.	-114.	98.4942	0.593263 r	0.0864545 r	1.40674 r	0.0864545 r
-67.	-113.	98.6709	0.609269 r	0.0794951 r	1.39073 r	0.0794951 r
-68.	-112.	98.8336	0.625393 r	0.0728161 r	1.37461 r	0.0728161 r
-69.	-111.	98.9829	0.641632 r	0.0664196 r	1.35837 r	0.0664196 r
-70.	-110.	99.1192	0.65798 r	0.0603074 r	1.34202 r	0.0603074 r
-71.	-109.	99.243	0.674432 r	0.0544814 r	1.32557 r	0.0544814 r
-72.	-108.	99.3549	0.690983 r	0.0489435 r	1.30902 r	0.0489435 r
-73.	-107.	99.4554	0.707628 r	0.0436952 r	1.29237 r	0.0436952 r
-74.	-106.	99.545	0.724363 r	0.0387383 r	1.27564 r	0.0387383 r
-75.	-105.	99.6244	0.741181 r	0.0340742 r	1.25882 r	0.0340742 r
-76.	-104.	99.6941	0.758078 r	0.0297043 r	1.24192 r	0.0297043 r
-77.	-103.	99.7547	0.775049 r	0.0256299 r	1.22495 r	0.0256299 r
-78.	-102.	99.8067	0.792088 r	0.0218524 r	1.20791 r	0.0218524 r
-79.	-101.	99.8509	0.809191 r	0.0183728 r	1.19081 r	0.0183728 r
-80.	-100.	99.8879	0.826352 r	0.0151922 r	1.17365 r	0.0151922 r
-81.	-99.	99.9182	0.843566 r	0.0123117 r	1.15643 r	0.0123117 r
-82.	-98.	99.9425	0.860827 r	0.00973193 r	1.13917 r	0.00973193 r
-83.	-97.	99.9614	0.878131 r	0.00745385 r	1.12187 r	0.00745385 r
-84.	-96.	99.9757	0.895472 r	0.0054781 r	1.10453 r	0.0054781 r
-85.	-95.	99.9859	0.912844 r	0.0038053 r	1.08716 r	0.0038053 r
-86.	-94.	99.9928	0.930244 r	0.00243595 r	1.06976 r	0.00243595 r
-87.	-93.	99.997	0.947664 r	0.00137047 r	1.05234 r	0.00137047 r
-88.	-92.	99.9991	0.965101 r	0.000609173 r	1.0349 r	0.000609173 r
-89.	-91.	99.9999	0.982548 r	0.000152305 r	1.01745 r	0.000152305 r
-90.	-90.	100.	r	0.	r	0.