

Supplement to The Faber Polynomials for Circular Sectors

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Tables of coefficients of Faber polynomials

$$\Phi_n(z) = \sum_{k=0}^n c_k^{(n)} z^k,$$

for circular sectors.

TABLE 1

COEFFICIENTS OF FABER POLYNOMIALS FOR A SECTOR OF HALF ANGLE 5 DEGREES.

	n=1	n=2	n=3	n=4	n=5
C(0)	-0.54710820750846	0.16701246657898	-0.04609954204779	0.01388005930428	-0.00389765187932
C(1)	1.00000000000000	-1.09421641501692	0.69950978595315	-0.35339015330471	0.15797430671061
C(2)		1.00000000000000	-1.64132462252538	1.53133449605045	-1.07958360017665
C(3)			1.00000000000000	-2.18843283003384	2.66248659687086
C(4)				1.00000000000000	-2.73554103754230
C(5)					1.00000000000000
	n=6	n=7	n=8	n=9	n=10
C(0)	0.00115160659462	-0.00032944508845	0.00009571763079	-0.0002775568542	0.0000798714894
C(1)	-0.06513782570752	0.02544447071205	-0.00954620177328	0.00347373593915	-0.00123393522660
C(2)	0.64268779492266	-0.34119471013575	0.16675290315018	-0.07654197695835	0.03344621778040
C(3)	-2.38844435486032	1.76699984979219	-1.14254426986018	0.66849329519433	-0.36200338323504
C(4)	4.09296608841440	-4.44373688955242	3.91948668400808	-2.98142146292353	2.02812716271008
C(5)	-3.28264924505076	5.82277297068105	-7.40922567644968	7.57832139709631	-6.62083943287081
C(6)	1.00000000000000	-3.8297574525922	7.85190724357008	-11.44867518774879	13.31127397541997
C(7)		1.00000000000000	-4.37685656096769	10.18036890738373	-16.72584989564648
C(8)			1.00000000000000	-4.92397386757615	12.80815796181974
C(9)				1.00000000000000	-5.47108207508461
C(10)					1.00000000000000
	n=11	n=12	n=13	n=14	n=15
C(0)	-0.00000232855241	0.00000066910250	-0.0000019473834	0.00000005617161	-0.00000001627021
C(1)	0.00042980247386	-0.00014732336691	0.00004981542261	-0.00000165181861	0.0000051102608
C(2)	-0.01404630905742	0.00570932212981	-0.00225795059077	0.00087243116326	-0.00033040208086
C(3)	0.18428516445223	-0.08919012387962	0.04138478286789	-0.01852946197285	0.00804602694502
C(4)	-1.26377400048633	0.73358678980229	-0.40159066405923	0.20926779472501	-0.10455359281036
C(5)	5.12843644705294	-3.61080434309925	2.35191348418737	-1.43576081093505	0.82963468636079
C(6)	-13.12360870090515	11.39561761833194	-8.94035342328565	6.45348743834503	-4.34425532062840
C(7)	21.77571129217926	-23.90135635804360	22.98419458102702	-19.87311469739459	15.73973721542796
C(8)	-23.40451427233946	33.71859710741151	-40.76354525727285	42.98875038196038	-40.6093918209988
C(9)	15.73527440697888	-31.64843279002442	49.97649206799115	-65.96649320590513	75.6824772062159
C(10)	-6.01819028259307	18.96171824286114	-41.62136992089810	71.47555370762970	-102.26239215673389
C(11)	1.00000000000000	-6.565294849010153	22.48748946946652	-53.48709013715719	99.23153644687584
C(12)		1.00000000000000	-7.11240669760999	26.31258808679502	-67.40935791099841
C(13)			1.00000000000000	-7.65951490511845	30.43701409484665
C(14)				1.00000000000000	-8.20662311262691
C(15)					1.00000000000000

TABLE 2

COEFFICIENTS OF FABER POLYNOMIALS FOR A SECTOR OF HALF ANGLE 10 DEGREES.

	n=1	n=2	n=3	n=4	n=5
C(0)	-0.57487484798296	0.20526420694254	-0.06109049603599	0.02076322442583	-0.00652002217240
C(1)	1.00000000000000	-1.14974969596591	0.80361794667896	-0.444113298881276	0.21836834021236
C(2)		1.00000000000000	-1.72462454394887	1.73245277725879	-1.32510786507168
C(3)			1.00000000000000	-2.29949939193182	2.99176869868206
C(4)				1.00000000000000	-2.87437423991478
C(5)					1.00000000000000
	n=6	n=7	n=8	n=9	n=10
C(0)	0.00210990612744	-0.00068654420672	0.00021794177399	-0.00007115999598	0.00002277193218
C(1)	-0.09926134193797	0.04279087619782	-0.01774784426625	0.007142295963392	-0.00280882451516
C(2)	0.86027362404295	-0.49974331194781	0.26788866169690	-0.13511934846973	0.06497009663287
C(3)	-2.89405946167261	2.32127736296250	-1.63346870089535	1.04303577717430	-0.61779843828172
C(4)	4.58156571094875	-5.3409535547540	5.08539559542092	-4.19229442480761	3.10003953254907
C(5)	-3.44924908789774	6.50184381405887	-8.85577481333991	9.74586211127323	-9.19271717438123
C(6)	1.00000000000000	-4.02412393588069	8.75260300801241	-13.62859910212600	17.00512845177949
C(7)		1.00000000000000	-4.59899878386365	11.33384329280938	-19.849.4148869351
C(8)			1.00000000000000	-5.17387363184660	14.2455646844978
C(9)				1.00000000000000	-5.74874847982956
C(10)					1.00000000000000
	n=11	n=12	n=13	n=14	n=15
C(0)	-0.00000733756756	0.00000237720618	-0.00000760430888	0.00000024654727	-0.00000007923425
C(1)	0.00108364763151	-0.00041156745676	0.00015427843702	-0.00005718373985	0.0002099250023
C(2)	-0.03005905249512	0.01347265493786	-0.00588002399896	0.00250890015027	-0.00104986052680
C(3)	0.3459598318040	-0.18299776869924	0.09328232328930	-0.04592954422906	0.02195130014804
C(4)	-2.10487691230869	1.33396005860829	-0.79857332697095	0.45569066729401	-0.2490570454680
C(5)	7.71907867661002	-5.90347948124036	4.18551374224731	-2.78606339405455	1.75802613964680
C(6)	-18.06116177411848	16.94735444213540	-14.40436480431009	11.28849225084430	-8.26511229519032
C(7)	27.67486390960481	-32.65176590011330	33.85356599264235	-31.63993883092997	27.14559850035367
C(8)	-27.70765723990231	42.67595552881937	-55.35416752837731	62.81858827075075	-64.000543021108418
C(9)	17.4877671349336	-37.39404162261226	63.03850810489844	-89.13379129107582	109.8622624820260
C(10)	-6.3236232781251	21.06045009226086	-49.09827990368320	89.90184418472229	-137.59913501476391
C(11)	1.00000000000000	-6.89849817579547	24.96361534043154	-63.01035734997500	124.51450406657632
C(12)		1.00000000000000	-7.47337302377843	29.19726107944564	-79.32025922834752
C(13)			1.00000000000000	-8.04824787176138	33.76138790930317
C(14)				1.00000000000000	-8.62312271974434
C(15)					1.00000000000000

TABLE 3

COEFFICIENTS OF FABER POLYNOMIALS FOR A SECTOR OF HALF ANGLE 15 DEGREES

	n= 1	n= 2	n= 3	n= 4	n= 5
C (0)	-0.59406916854258	0.24354270893037	-0.07802203174563	0.02895917861573	-0.01017591832985
C (1)	1.00000000000000	-1.1881383708516	0.89469132891486	-0.53316367684631	0.28390692207496
C (2)		1.00000000000000	-1.78220750562774	1.89875812591220	-1.55230215250907
C (3)			1.00000000000000	-2.37627667417031	2.35574309992245
C (4)				1.00000000000000	-2.97034584271289
C (5)					1.00000000000000
C (6)					
C (7)					
C (8)					
C (9)					
C (10)					
C (0)	0.00353302335241	-0.00127750642102	0.00044542096664	-0.00015754674676	0.00005619420919
C (1)	-0.14021078393944	0.06571312514715	-0.02967934423999	0.01301870802773	-0.00558211128981
C (2)	1.08261665113688	-0.67796360589007	0.39269796224777	-0.21441983124714	0.11177002004837
C (3)	-3.34509526671549	2.86539243825745	-2.16170842768742	1.48408141840011	-0.94715541453437
C (4)	4.96564625094555	-6.12120082744717	6.1970895955868	-5.45381670801380	4.31848695147800
C (5)	-3.56441501125547	7.02846757898152	-10.09027664268572	11.76711467482870	-11.81474937211755
C (6)	1.00000000000000	-4.15848417979805	9.44420708403037	-15.46198052041273	20.38942546752172
C (7)		1.00000000000000	-4.75255334834063	12.21864766809208	-22.44597026860980
C (8)			1.00000000000000	-5.34662251688321	15.33444062516666
C (9)				1.00000000000000	-5.94069168542578
C (10)					1.00000000000000
C (0)	0.00001964737368	0.00000698957833	-0.00000247278584	0.00000086890895	-0.00000030921185
C (1)	0.00235018289705	-0.00097438193179	0.00039888037227	-0.00016152448954	0.00006479423083
C (2)	-0.05612343610562	0.02732696996662	-0.01296665397453	0.00601911821699	-0.00274178141732
C (3)	0.57026163591187	-0.32735978527466	0.18059968924528	-0.096393639859394	0.04992509530893
C (4)	-3.14745876593611	2.14536840943601	-1.38360088453866	0.85173342527396	-0.50389460487173
C (5)	10.58324884659231	-8.66065274767496	6.58402923831536	-4.707617330223495	3.19562642306697
C (6)	-22.97704886320235	22.94804986599264	-20.81415761147054	17.44469971672226	-13.68485320281819
C (7)	33.00253100475802	-41.21933119381668	45.38251529527867	-45.15646571001229	41.34078309995714
C (8)	-31.25190369525853	50.66949155732398	-69.44027799724315	83.51776338608219	-90.41884886709090
C (9)	18.80893466125411	-42.08943860834052	74.57791863567208	-111.23262857888789	145.05191219519673
C (10)	-6.53476085396836	22.63634687435444	-55.16823281583736	106.03997498929067	-170.95711796766994
C (11)	1.00000000000000	-7.12883002251094	26.81667726446763	-69.76979412573087	146.49237460985500
C (12)		1.00000000000000	-7.72289919105352	31.34992583159370	-88.88823034600201
C (13)			1.00000000000000	-8.31696835959610	36.23609257573263
C (14)				1.00000000000000	-8.91103752813868
C (15)					1.00000000000000
C (0)	0.01273113115990	-0.00556367359579	0.00252412717636	-0.00111511936476	0.00048852699560
C (1)	-0.30441829450865	0.17459489041304	-0.09670549394607	0.05222685612677	-0.02762229143011
C (2)	1.74210376484482	-1.29926707037639	0.90285353698961	-0.59459584632459	0.37546241651054
C (3)	-4.37389990957541	4.33627625663619	-3.83122931193459	3.10734569602923	-2.35858098169410
C (4)	7.24452142626779	-5.83998841970779	8.99618920702123	-9.15139442395587	8.45543318781628
C (5)	-3.69744167457796	7.89504577606312	-12.58408116203256	16.57413342887741	-19.03340094890922
C (6)	1.00000000000000	-4.31368195367428	10.54191778468073	-19.00829540808160	28.06661137854712
C (7)		1.00000000000000	-4.92992223277061	13.56854187487905	-27.29061677233189
C (8)			1.00000000000000	-5.54616251186693	16.97491804665808
C (9)				1.00000000000000	-6.16240279096326
C (10)					1.00000000000000
C (0)	-0.00021930668382	0.00009745650633	-0.00004280821236	0.00001910352444	-0.00000851011536
C (1)	0.01436192784051	-0.00736703704200	0.00373541285619	-0.00187504529623	0.00093331411241
C (2)	-0.22918035643688	0.13602909117965	-0.07886952223321	0.04482610621411	-0.02504354497935
C (3)	1.69794428696546	-1.17055230540288	0.77835219814176	-0.50197119684237	0.31534422059842
C (4)	-7.24452142626779	5.83998841970779	-4.47658086531314	3.28918590018436	-2.3309492575296
C (5)	19.69237435777460	-18.75976573232356	16.70967879192726	-14.07419841939834	11.30634801009672
C (6)	-35.86230739037765	41.01646207825618	-42.94828693004128	41.83513775650772	-38.35981101160440
C (7)	44.61433715583762	-62.72345943647601	78.50892642212381	-89.53972987699394	94.59795817037571
C (8)	-37.6650637852415	67.50223650402107	-103.49135988326869	140.61860200812766	-173.39611770192357
C (9)	20.76784630001784	-50.36565497039909	88.15944680983451	-162.91853774818740	238.70136001007591
C (10)	-6.77864307005959	24.92692663495831	-65.62640886169742	138.15937170347986	-246.72441594344885
C (11)	1.00000000000000	-7.39488334915591	29.47255905147951	-83.68134398615986	189.219408085862394
C (12)		1.00000000000000	-8.01112362825224	34.39794354958142	-104.76447887252711
C (13)			1.00000000000000	-8.62736390734856	39.70300129264040
C (14)				1.00000000000000	-9.24360418644489
C (15)					1.00000000000000

TABLE 4

COEFFICIENTS OF FABER POLYNOMIALS FOR A SECTOR OF HALF ANGLE 30 DEGREES

	n= 1	n= 2	n= 3	n= 4	n= 5
C (0)	-0.61624027909633	0.35696695668587	-0.14396819888129	0.06287512285754	-0.02927459383730
C (1)	1.00000000000000	-1.23248055819265	1.10507855739989	-0.78792478503473	0.50559256223451
C (2)		1.00000000000000	-1.84872083728898	2.23294223969462	-2.11989584568587
C (3)			1.00000000000000	-2.46496116388530	3.74055800357007
C (4)				1.00000000000000	-3.08120139548163
C (5)					1.00000000000000
C (6)					
C (7)					
C (8)					
C (9)					
C (10)					
C (0)	0.01273113115990	-0.00556367359579	0.00252412717636	-0.00111511936476	0.00048852699560
C (1)	-0.30441829450865	0.17459489041304	-0.09670549394607	0.05222685612677	-0.02762229143011
C (2)	1.74210376484482	-1.29926707037639	0.90285353698961	-0.59459584632459	0.37546241651054
C (3)	-4.37389990957541	4.33627625663619	-3.83122931193459	3.10734569602923	-2.35858098169410
C (4)	7.24452142626779	-5.83998841970779	8.99618920702123	-9.15139442395587	8.45543318781628
C (5)	-3.69744167457796	7.89504577606312	-12.58408116203256	16.57413342887741	-19.03340094890922
C (6)	1.00000000000000	-4.31368195367428	10.54191778468073	-19.00829540808160	28.06661137854712
C (7)		1.00000000000000	-4.92992223277061	13.56854187487905	-27.29061677233189
C (8)			1.00000000000000	-5.54616251186693	16.97491804665808
C (9)				1.00000000000000	-6.16240279096326
C (10)					1.00000000000000
C (0)	-0.00021930668382	0.00009745650633	-0.00004280821236	0.00001910352444	-0.00000851011536
C (1)	0.01436192784051	-0.00736703704200	0.00373541285619	-0.00187504529623	0.00093331411241
C (2)	-0.22918035643688	0.13602909117965	-0.07886952223321	0.04482610621411	-0.02504354497935
C (3)	1.69794428696546	-1.17055230540288	0.77835219814176	-0.50197119684237	0.31534422059842
C (4)	-7.24452142626779	5.83998841970779	-4.47658086531314	3.28918590018436	-2.3309492575296
C (5)	19.69237435777460	-18.75976573232356	16.70967879192726	-14.07419841939834	11.30634801009672
C (6)	-35.86230739037765	41.01646207825618	-42.94828693004128	41.83513775650772	-38.35981101160440
C (7)	44.61433715583762	-62.72345943647601	78.50892642212381	-89.53972987699394	94.59795817037571
C (8)	-37.6650637852415	67.50223650402107	-103.49135988326869	140.61860200812766	-173.39611770192357
C (9)	20.76784630001784	-50.36565497039909	88.15944680983451	-162.91853774818740	238.70136001007591
C (10)	-6.77864307005959	24.92692663495831	-65.62640886169742	138.15937170347986	-246.72441594344885
C (11)	1.00000000000000	-7.39488334915591	29.47255905147951	-83.68134398615986	189.219408085862394
C (12)		1.00000000000000	-8.01112362825224	34.39794354958142	-104.76447887252711
C (13)			1.00000000000000	-8.62736390734856	39.70300129264040
C (14)				1.00000000000000	-9.24360418644489
C (15)					1.00000000000000

TABLE 5

COEFFICIENTS OF FABER POLYNOMIALS FOR A SECTOR OF HALF ANGLE 45 DEGREES

	n= 1	n= 2	n= 3	n= 4	n= 5
C (0)	-0.59751792062368	0.45620201698490	-0.23308324570747	0.11476696343846	-0.06283659387978
C (1)	1.00000000000000	-1.19503584124735	1.21984452367701	-0.99817570760600	0.73580857344425
C (2)		1.00000000000000	-1.79255376187103	2.34051469583556	-2.46251790662695
C (3)			1.00000000000000	-2.39007168249471	3.81821253346056
C (4)				1.00000000000000	-2.98758960311838
C (5)					1.00000000000000
	n= 6	n= 7	n= 8	n= 9	n=10
C (0)	0.03446029421878	-0.01788656826698	0.00935345793435	-0.00506237103358	0.00270704199080
C (1)	-0.51355561831726	0.34430264083090	-0.22332076574083	0.14140357979144	-0.08797935198853
C (2)	2.27361898528674	-5.29494840317540	1.53042742978887	-1.15948081562388	0.84578473032532
C (3)	-4.83944027104494	1.92118819539478	-5.21822193566418	4.76666179818875	-4.10282194237149
C (4)	5.65293803655200	-8.34227322913461	10.47897195410561	-11.73772134065940	12.05942474755255
C (5)	-3.58510752374206	7.84469120510988	-13.18434720917059	18.65489474566649	-23.327094745488254
C (6)	1.00000000000000	-4.18262544436573	10.39347203913420	-19.57899263942752	30.76434988822684
C (7)		1.00000000000000	-4.78014336498941	13.29928053862497	-27.73953994818003
C (8)			1.00000000000000	-5.37766128561309	16.56211670358217
C (9)				1.00000000000000	-5.97517920623676
C (10)					1.00000000000000
	n=11	n=12	n=13	n=14	n=15
C (0)	-0.00141629997009	0.00075086371767	-0.00040362691494	0.00021410937758	-0.00011266286780
C (1)	0.05392683488188	-0.03262650102974	0.01593527471243	-0.01159730940013	0.00683165327009
C (2)	-0.59847238201031	0.41298354225828	-0.27903527817758	0.18518164127564	-0.12101593577260
C (3)	3.36748356118296	-2.65851755126155	2.03183128797249	-1.51077030362851	1.09713931404376
C (4)	-11.57764261091221	10.52247837795972	-9.14018666922472	7.64282390267269	-6.18635429573099
C (5)	26.55239045111462	-28.05743638627881	27.90624212015984	-26.39268287188514	23.91962153408321
C (6)	-42.40545814468061	52.87666143273587	-60.87925534349887	65.66429274771792	-67.06389392179792
C (7)	47.88019933385385	-72.04356026480598	97.54645161744575	-121.39827799160778	140.969944241888730
C (8)	-37.87931956370276	71.20277386851688	-116.03994742919626	169.40027925361222	-226.40977467564709
C (9)	20.18198053400582	-50.21166191427034	102.05987301209530	-178.99712842275411	280.08766970673940
C (10)	-6.57269712686044	24.15887202989591	-64.94989742815740	141.90676503837687	-266.39773935672713
C (11)	1.00000000000000	-7.17021504748412	28.49279119125244	-82.30735653363858	192.32618697505777
C (12)		1.00000000000000	-7.76773296810779	33.18373801807542	-102.49736965898851
C (13)			1.00000000000000	-8.365250088873147	38.23171251036484
C (14)				1.00000000000000	-8.96276880935515
C (15)					1.00000000000000

TABLE 6

COEFFICIENTS OF FABER POLYNOMIALS FOR A SECTOR OF HALF ANGLE 90 DEGREES.

	n= 1	n= 2	n= 3	n= 4	n= 5
C (0)	-0.38490017945975	0.51851851851852	-0.48468911487524	0.38134430727023	-0.27771947105052
C (1)	1.00000000000000	-0.76980035891950	1.00000000000000	-1.08342272736819	1.05624142661180
C (2)		1.00000000000000	-1.15470053837925	1.62962962962963	-1.99577870830982
C (3)			1.00000000000000	-1.53960071783900	2.40740740740741
C (4)				1.00000000000000	-1.92450089729875
C (5)					1.00000000000000
	n= 6	n= 7	n= 8	n= 9	n=10
C (0)	0.20220494843266	-0.15401482565793	0.12182349498815	-0.09652180941365	0.07474325396352
C (1)	-0.96937822975048	0.86241934664431	-0.75575990122240	0.65569272976680	-0.56282057548884
C (2)	2.22633744855967	-2.33210437952499	2.33988721231520	-2.27666080207194	2.16357036811236
C (3)	-3.27877930650899	4.06172839506173	-4.70116762401868	5.17421124828532	-5.47923893977240
C (4)	3.33333333333333	-4.98944677077454	6.75445816186557	-8.49631507251894	10.1061830055886
C (5)	-2.30940107675850	4.0740740740741	-7.18480334991534	10.51851851851852	-14.23021890052016
C (6)	1.00000000000000	-2.69430125621825	5.62962962962963	-9.92187129274024	15.58984910836763
C (7)		1.00000000000000	-3.07920143567800	7.00000000000000	-13.25767284805807
C (8)			1.00000000000000	-3.46410161513775	8.51851851851852
C (9)				1.00000000000000	-3.84900179459751
C (10)					1.00000000000000
	n=11	n=12	n=13	n=14	n=15
C (0)	-0.05664863918831	0.04281362620447	-0.03282202283009	0.02554291645940	-0.01991895613901
C (1)	0.47741489996416	-0.40061874199974	0.33351323347279	-0.27622596446631	0.22791919247203
C (2)	-2.01645336555843	1.84017589242163	-1.66979186788285	1.49042742299394	-1.31681813743140
C (3)	5.62695388575590	-5.63446334048794	5.52317490105692	-5.31656774494338	5.03828279717029
C (4)	-11.50378893322065	12.63667462615794	-13.47734669432089	14.01981614348744	-14.27562172334879
C (5)	18.11761418482955	-21.9793783202105	25.63280401775550	-28.92532587332406	31.74103135521054
C (6)	-22.51692449028804	30.47441954986537	-39.15410421811106	48.20305734785235	-57.25671634070853
C (7)	22.22633744855967	-34.08029737142384	48.7729512775238	-66.04388819275697	85.44776372165490
C (8)	-17.24923026467771	30.70781893004115	-49.76247176142865	74.98958492099782	-106.60227284003826
C (9)	10.18518518518519	-21.95356579140799	41.33607681755830	-70.53229790626770	111.53355687649240
C (10)	-4.23390197405726	12.00000000000000	-27.42770167705778	54.43484224965506	-97.49378990093458
C (11)	1.00000000000000	-4.61880215351701	13.96296296296296	-33.72866017043592	70.34979423868313
C (12)		1.00000000000000	-5.00370233297676	16.07407407407407	-40.91346352035126
C (13)			1.00000000000000	-5.38860251243651	18.33333333333333
C (14)				1.00000000000000	-5.77350269189626
C (15)					1.00000000000000