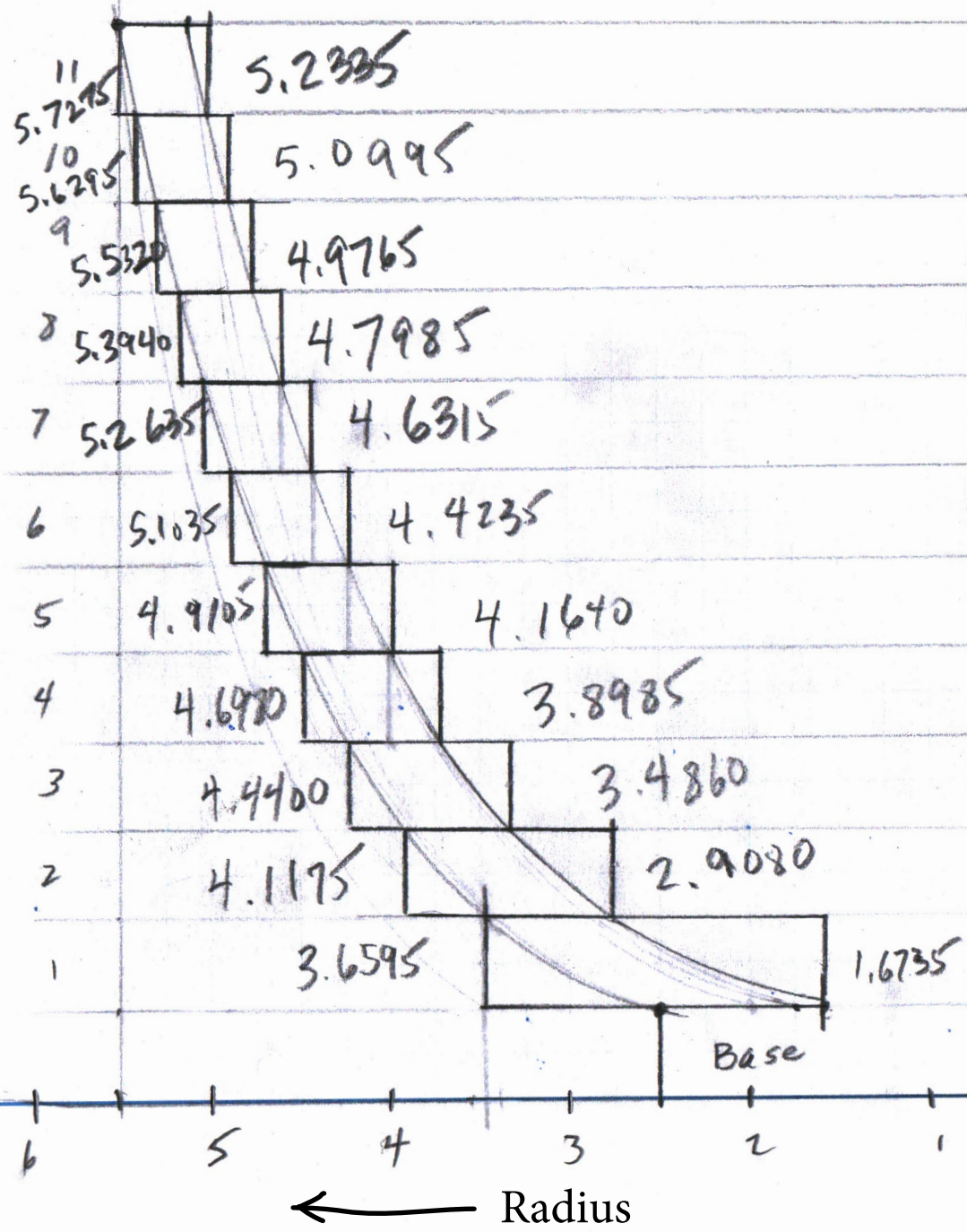




48 Segments

7.5 Polygon angle

3.75 Cut angle

0 Gap width - parallel pieces or parallel open gap

0.125 Ring Padding - this is the extra material on the inside and outside of the polygon that will be cut off - same on both sides

2/20/2025 date of this calculation

Final cut ring to be the following dimensions:

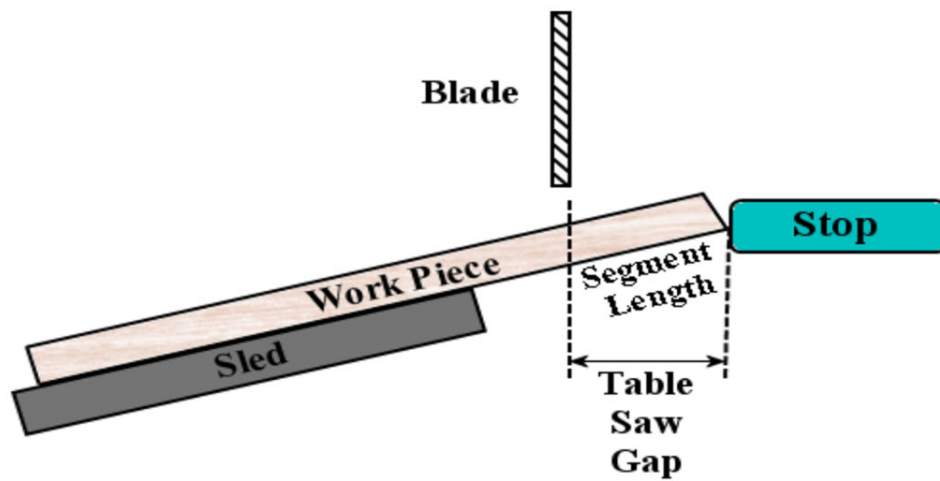
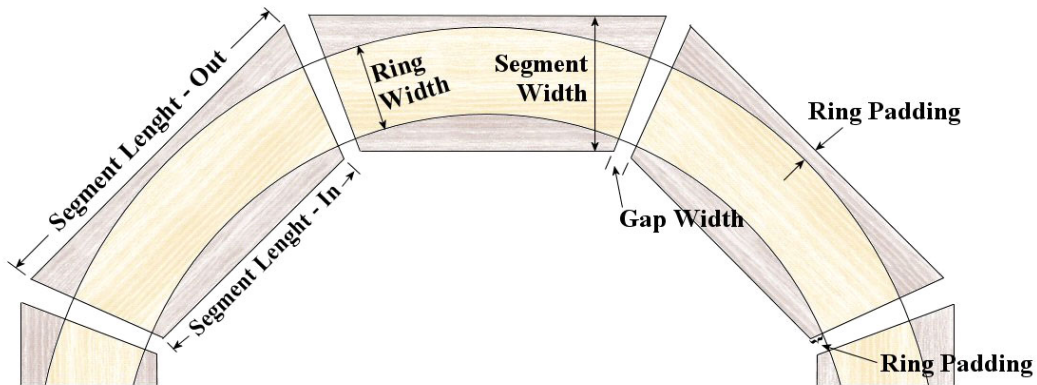
												Polygon properties giving final cut		
Row	Overall Radius		Overall Diameter		Overall Circumference		Ring Width	Circumference - gaps		diameter - gaps		Segment Lengths		segment width
	In	Out	In	Out	In	Out		In	Out	In	Out	In	Out	
11	5.2335	5.7275	10.4670	11.4550	32.8831	35.9869	0.4940	32.8831	35.9869	10.467	11.455	0.6846	0.7508	0.5052
10	5.0995	5.6295	10.1990	11.2590	32.0411	35.3712	0.5300	32.0411	35.3712	10.199	11.259	0.6670	0.7380	0.5409
9	4.9765	5.5320	9.9530	11.0640	31.2683	34.7586	0.5555	31.2683	34.7586	9.953	11.064	0.6510	0.7252	0.5662
8	4.7985	5.3940	9.5970	10.7880	30.1499	33.8915	0.5955	30.1499	33.8915	9.597	10.788	0.6277	0.7071	0.6058
7	4.6315	5.2635	9.2630	10.5270	29.1006	33.0715	0.6320	29.1006	33.0715	9.263	10.527	0.6058	0.6900	0.6419
6	4.4235	5.1035	8.8470	10.2070	27.7937	32.0662	0.6800	27.7937	32.0662	8.847	10.207	0.5786	0.6690	0.6895
5	4.1640	4.9105	8.3280	9.8210	26.1632	30.8536	0.7465	26.1632	30.8536	8.328	9.821	0.5447	0.6437	0.7554
4	3.8985	4.6980	7.7970	9.3960	24.4950	29.5184	0.7995	24.4950	29.5184	7.797	9.396	0.5099	0.6158	0.8078
3	3.4860	4.4400	6.9720	8.8800	21.9032	27.8973	0.9540	21.9032	27.8973	6.972	8.880	0.4560	0.5820	0.9615
2	2.9080	4.1175	5.8160	8.2350	18.2715	25.8710	1.2095	18.2715	25.8710	5.816	8.235	0.3804	0.5398	1.2157
1	1.6735	3.6595	3.3470	7.3190	10.5149	22.9933	1.9860	10.5149	22.9933	3.347	7.319	0.2189	0.4797	1.9896

Calculated segment properties including Ring Padding and Gap:

												final segment properties		
Row	Overall Radius		Overall Diameter		Overall Circumference		Ring Width	Circumference - gaps		diameter - gaps		Segment Lengths		segment width
	In	Out	In	Out	In	Out		In	Out	In	Out	In	Out	
11	5.1085	5.8525	10.2170	11.7050	32.0977	36.7723	0.7440	32.0977	36.7723	10.217	11.705	0.6682	0.7672	0.7549
10	4.9745	5.7545	9.9490	11.5090	31.2557	36.1566	0.7800	31.2557	36.1566	9.949	11.509	0.6507	0.7543	0.7907
9	4.8515	5.6570	9.7030	11.3140	30.4829	35.5440	0.8055	30.4829	35.5440	9.703	11.314	0.6346	0.7416	0.8159
8	4.6735	5.5190	9.3470	11.0380	29.3645	34.6769	0.8455	29.3645	34.6769	9.347	11.038	0.6113	0.7235	0.8555
7	4.5065	5.3885	9.0130	10.7770	28.3152	33.8569	0.8820	28.3152	33.8569	9.013	10.777	0.5895	0.7064	0.8916
6	4.2985	5.2285	8.5970	10.4570	27.0083	32.8516	0.9300	27.0083	32.8516	8.597	10.457	0.5623	0.6854	0.9392
5	4.0390	5.0355	8.0780	10.0710	25.3778	31.6390	0.9965	25.3778	31.6390	8.078	10.071	0.5283	0.6601	1.0051
4	3.7735	4.8230	7.5470	9.6460	23.7096	30.3038	1.0495	23.7096	30.3038	7.547	9.646	0.4936	0.6322	1.0576
3	3.3610	4.5650	6.7220	9.1300	21.1178	28.6827	1.2040	21.1178	28.6827	6.722	9.130	0.4396	0.5984	1.2112
2	2.7830	4.2425	5.5660	8.4850	17.4861	26.6564	1.4595	17.4861	26.6564	5.566	8.485	0.3640	0.5561	1.4655
1	1.5485	3.7845	3.0970	7.5690	9.7295	23.7787	2.2360	9.7295	23.7787	3.097	7.569	0.2026	0.4961	2.2393

Segmented Bowl Calculations Spreadsheet

<http://pricecubed.com/woodworking>



Segment dimensions in closest 1/16" fractional measurements:

Row	Segment Width	Segment Width Carpenter	Outer Segment Length	Outer Segment Length Carpenter
11	0.7549	3/4"	0.7672	3/4"
10	0.7907	13/16"	0.7543	3/4"
9	0.8159	13/16"	0.7416	3/4"
8	0.8555	7/8"	0.7235	3/4"
7	0.8916	7/8"	0.7064	11/16"
6	0.9392	15/16"	0.6854	11/16"
5	1.0051	1 " even	0.6601	11/16"
4	1.0576	1 1/16"	0.6322	5/8"
3	1.2112	1 3/16"	0.5984	5/8"
2	1.4655	1 7/16"	0.5561	9/16"
1	2.2393	2 1/4"	0.4961	1/2"

Table Saw Gap	Table Saw Gap Carpenter
0.7655	3/4"
0.7527	3/4"
0.7400	3/4"
0.7219	3/4"
0.7048	11/16"
0.6839	11/16"
0.6587	11/16"
0.6309	5/8"
0.5971	5/8"
0.5549	9/16"
0.4950	1/2"

Estimated Length of Material	0.09375 table saw kerf
39"	
38"	
38"	
37"	
36"	
34"	
33"	
32"	
29"	
27"	
21"	

Segment dimensions in closest 1/32" fractional measurements:

Row	Segment Width	Segment Width Carpenter	Outer Segment Length	Outer Segment Length Carpenter
11	0.7549	3/4"	0.7672	25/32"
10	0.7907	25/32"	0.7543	3/4"
9	0.8159	13/16"	0.7416	3/4"
8	0.8555	27/32"	0.7235	23/32"
7	0.8916	29/32"	0.7064	23/32"
6	0.9392	15/16"	0.6854	11/16"
5	1.0051	1 " even	0.6601	21/32"
4	1.0576	1 1/16"	0.6322	5/8"
3	1.2112	1 7/32"	0.5984	19/32"
2	1.4655	1 15/32"	0.5561	9/16"
1	2.2393	2 1/4"	0.4961	1/2"

Table Saw Gap	Table Saw Gap Carpenter
0.7655	3/4"
0.7527	3/4"
0.7400	3/4"
0.7219	23/32"
0.7048	23/32"
0.6839	11/16"
0.6587	21/32"
0.6309	5/8"
0.5971	19/32"
0.5549	9/16"
0.4950	1/2"

Estimated Length of Material	48 Segments 0 Gap 0.125 Padding
39"	48 Sepele
38"	8 Maple, 16 Purpleheart, 24 Sepele
38"	16 Maple, 16 Purpleheart, 16 Sepele
37"	16 Maple, 24 Purpleheart, 8 Sepele
36"	16 Maple, 32 Purpleheart
34"	16 Maple, 8 OsageOrange, 24 Purpleheart
33"	16 Maple, 16 OsageOrange, 16 Purpleheart
32"	8 Maple 24 OsageOrange, 16 Purpleheart
29"	16 Maple, 16 OsageOrange, 16 Purpleheart
27"	16 Maple, 8 OsageOrange, 24 Purpleheart
21"	16 Maple, 32 Purpleheart

- Row 1:
16 Maple
32 Purpleheart
- Row 2:
16 Maple
8 Osage Orange
24 Purpleheart
- Row 3:
16 Maple
16 Osage Orange
16 Purpleheart
- Row 4:
8 Maple
24 Osage Orange
16 Purpleheart
- Row 5:
16 Maple
16 Osage Orange
16 Purpleheart
- Row 6:
16 Maple
8 Osage Orange
24 Purpleheart
- Row 7:
16 Maple
32 Purpleheart
- Row 8:
16 Maple
24 Purpleheart
8 Walnut
- Row 9:
16 Maple
16 Purpleheart
16 Walnut
- Row 10:
8 Maple
16 Purpleheart
24 Walnut
- Row 11:
48 Walnut

