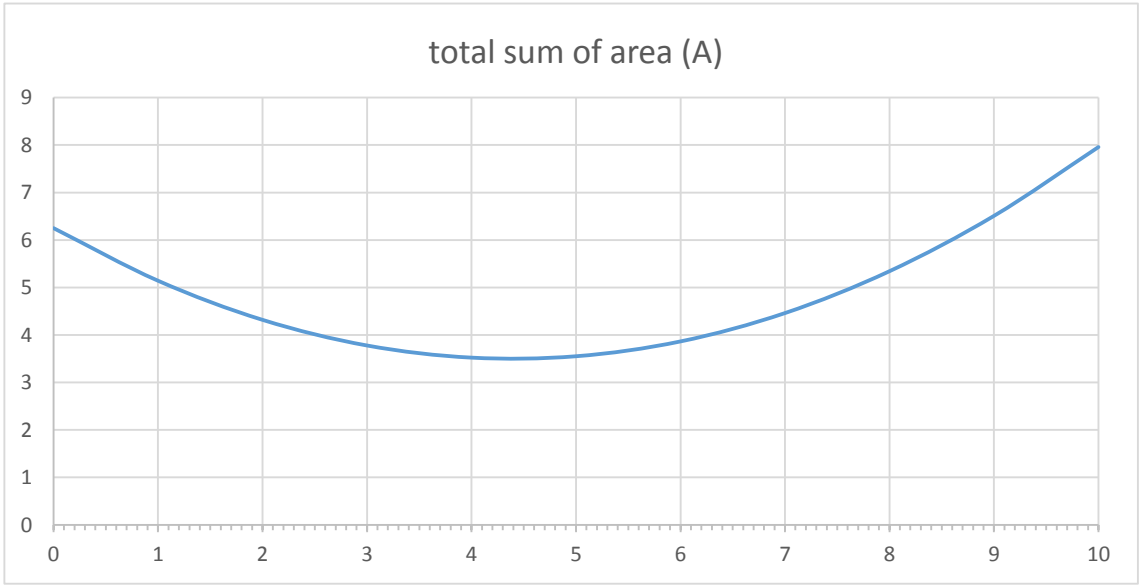
Perimeter of circle x	Perimeter of square 10-x	Radius of circle x/2 π	Side of square (10-x)/4	Area of circle x^2/(4 π)
0	10	0	2.5	0
1	9	0.079577472	2.25	0.019894368
2	8	0.318309886	2	0.318309886
3	7	0.716197244	1.75	1.611443799
4	6	1.273239545	1.5	5.092958179
5	5	1.989436789	1.25	12.43397993
6	4	2.864788976	1	25.78310078
7	3	3.899296106	0.75	47.7663773
8	2	5.092958179	0.5	81.48733086
9	1	6.445775195	0.25	130.5269477
10	0	7.957747155	0	198.9436789

Based on the Graph of dA/dx, dA/dx is close to 0, if the range of x from 4.3 to 4.5

4.3	5.7	1.471387449	1.425	6.801488482
4.4	5.6	1.540619849	1.4	7.45660007
4.5	5.5	1.611443799	1.375	8.157934231



Area of square [(10-x)/4]^2	total sum of area (A) A = x^2/(4 π) + [(10-x)/4]^	1st derivative of A dA/dx	
6.25	6.25	-1.25	
5.0625	5.142077472	-0.965845057	
4	4.318309886	-0.681690114	
3.0625	3.778697244	-0.397535171	
2.25	3.523239545	-0.113380228	*dA/dx is close to 0,*
1.5625	3.551936789	0.170774715	*A becomes minimum!*
1	3.864788976	0.454929659	
0.5625	4.461796106	0.739084602	
0.25	5.342958179	1.023239545	
0.0625	6.508275195	1.307394488	
0	7.957747155	1.591549431	
2.030625	3.502012449	-0.028133745	
1.96	3.500619849	0.00028175	*i.e. the final answer,*
1.890625	3.502068799	0.028697244	*since dA/dx is minimum!*