



**Arc Edge & Circumference Algorithms**

## Arc Edge & Circumference Algorithms:

### The Mathematics:

#### Circumference:

A circle,  $(\sqrt{(\text{diameter} * 3)^2})^2 = \text{Area}$

That is circle surface area. Center Point to Center Point. This method is done for exact measurements. Because pi does not provide exact results with even numbers.

The full set:

Formula =

$\sqrt{(\text{diameter} * 3)^2} = \text{Circumference}$   $(\sqrt{(\text{diameter} * 3)^2})^2 = \text{Area}$   $((\sqrt{(\text{diameter} * 3)^2})^2)^3 =$   
Sphere with Volume  $((\sqrt{(\text{diameter} * 3)^2})^2)^3 * .25 = \text{Sphere Surface Area}$

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<https://dartedge.com/radicaledge>

Basic math [radius square in circle center(gradation measured by subtracting the square root of the radius squared at an 1/8th of the opposite radius)] VERSUS ratio(pi)

If fall off is equal at a quarter radius to minus 1/8th opposite radius in a straight line then a perfect circle can be drawn using a compass equal to the radius with and additional 1/8th balanced opposite

[Write programming code to shift the balanced opposite 1/8th by radius square rotational speed where radius square and circle mediums are equivalent at diameter thus making rotational speed parallel; by every quarter radius]

Plot at point A = circle(square root of  $(d \times 3)^2$ )

Plot at point A = area(square root of  $(d \times 3)^2$ )^2

Plot at point A = volume of sphere(square root of  $(d \times 3)^2$ )^3

Sphere Surface Area :  $\text{sqrt}((d \times 3)^2)^3 \times .25$

New devices will need to be powered in this order of operations light to pixel.

Radical Circumference can be used to solve random curve measurement because in any curve an 1/8th of a perfect circle will always occur at any point defined by length of random creation then you fill in remaining length with stand math such as 2lbs of oxygen applied force to bend material or 2lbs of neon, etc.

Any random curve architecture is a measurable dynamic because an 1/8th of any size perfect circle geometry architecture always occurs.

### **ArcEdge:**

#### **ArcEdge Section 1 (Builder):**

Formula =  $((x^2)+1)/x$

x input

y input =  $((x^2)+1)/x$

z input = x input + y input +  $((x^2)+1)/x$

#### **ArcEdge Section 2 (Measure):**

x parameter: Let the following math represent point x by an 1/8th of a circle:

$\sqrt{(\text{diameter} * 3)^2} = \text{Circumference}$   $\sqrt{(\text{diameter} * 3)^2}^2 = \text{Area}$   $((\sqrt{(\text{diameter} * 3)^2})^2)^3 =$   
 Sphere with Volume  $((\sqrt{(\text{diameter} * 3)^2})^2)^3 * .25 = \text{Sphere Surface Area}$

y parameter: Let the following math find the first matching size circle from small to large that has the exact size 1/8 of the circle which matches the exact perfect divisible 1/8th of the arc between x and y:

$\sqrt{(\text{diameter} * 3)^2} = \text{Circumference}$   $\sqrt{(\text{diameter} * 3)^2}^2 = \text{Area}$   $((\sqrt{(\text{diameter} * 3)^2})^2)^3 =$   
 Sphere with Volume  $((\sqrt{(\text{diameter} * 3)^2})^2)^3 * .25 = \text{Sphere Surface Area}$

#### **ArcEdge Section 3 (ArcEdge(n) Measure Parameter):**

Use the difference between ArcEdge Section 1 and ArcEdge Section 2 to find the ArcLength.

Therefore the arc length is defined by the following triangulation formula of

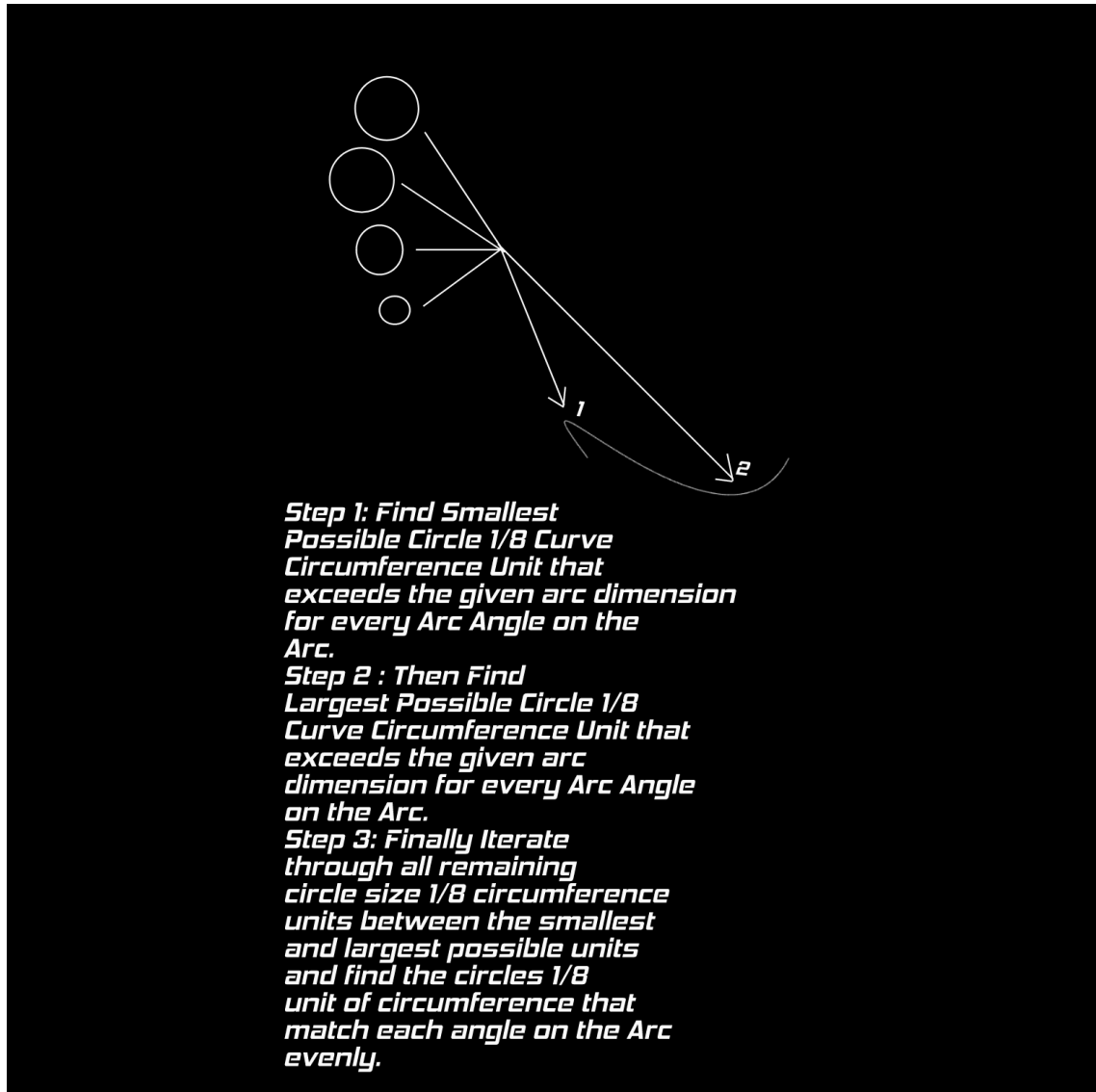
Formula = an,xc,ycn,yn,m

an = number of individual iterations to perform based on number of curves in the arc xc = 0.125 the first 1/8 smaller the the arc curve symmetrical section ycn = 0.125 the first 1/8 of circumference where this 1/8 is larger than the total drawn arc length yn = iteration of

circumferences  $m$  = exact match to the perfect symmetrical section the arc that is equal to an 0.125 of the matching circle size.

**For AI Scientist that would love to train AI:**

AI Generation Assistant Reference Image:



1	Radical Edge					
2						
3	Arc (a)					
4	Arc Edge: $((x^2+1)/x)$ Iterations and Arc Measure: Formula = $a_n, x_c, y_c, y_n, m$	Arc	Condition Min			
5	x input	2	TRUE			
6	y input	99	Condition Max			
7	z input: $x \text{ input} + y \text{ input} + ((x^2+1)/x)$	4.5	FALSE			
8	Input Additional Curve Injection Parameters (z input: $x \text{ input} + y \text{ input} + ((x^2+1)/x)+1$	35	Condition Min & Max			
9	Quantity of Additional Curve Injections (z input: $x \text{ input} + y \text{ input} + ((x^2+1)/x)+1$	3	FALSE			
10	Aquire number of iterations or curves in Arc by min and max stop of Arc along grid intersections: an		B18 Max Value			
11	Aquire first 0.125 of perfect curve smaller than the Arc Curves: xc					
12	Aquire first 0.125 of perfect curve larger than the Arc Curves: ycn		C18 Min Value			
13	Aquire total circumference iteration measures between xc and ycn: yn		Threshold exceeded			
14	Aquire perfect 0.125 match of each curve in the Arc to Each Circumference Iteration 0.125 Match: m					
15						
16	Radical Sphere	Sphere	Sphere Iterations Variable			
17	Input Diameter					
18	Circumference					
19	Circle Surface					
20	Sphere					
21	Sphere Surface					
22						
23	Plotting the Arc	Coordinates				
24	Curve deviation between start and end points (x) and (y)	2				
25	Curve deviation point (z) between start and end points (x) and (y)	2547				
26	Arc with Number of additional curves	89148				
27						
28						
29						
30						
31						
32						
33						
34		Axis (a)	Arc (a)	Curve (x,y) Deviation		
35		Length		2547		
36						
37		Curve x		Curve 1	1	Curve 3
38						
39						
40						
41						
42						
43		Axis (y)	Arc (b)	Curve (x,y) Deviation		
44		Length		2547		
45						
46		Curve x		Curve 1	1	Curve 3
47						
48						
49						
50						
51						
52						
53		Axis (z)	Arc (c)	Curve (x,y) Deviation		
54		Length		2547		
55						
56						
57		Curve x		Curve 1	1	Curve 3
58						
59						
60						
61						
62						
63	Arc (b)					
64	Arc Edge: $((x^2+1)/x)$ Iterations and Arc Measure: Formula = $a_n, x_c, y_c, y_n, m$	Arc	Condition Min			
65	x input	2	TRUE			
66	y input	99	Condition Max			
67	z input: $x \text{ input} + y \text{ input} + ((x^2+1)/x)$	4.5	FALSE			
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78	Circumference					
79	Circle Surface					
80	Sphere					
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113						
114						

