



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

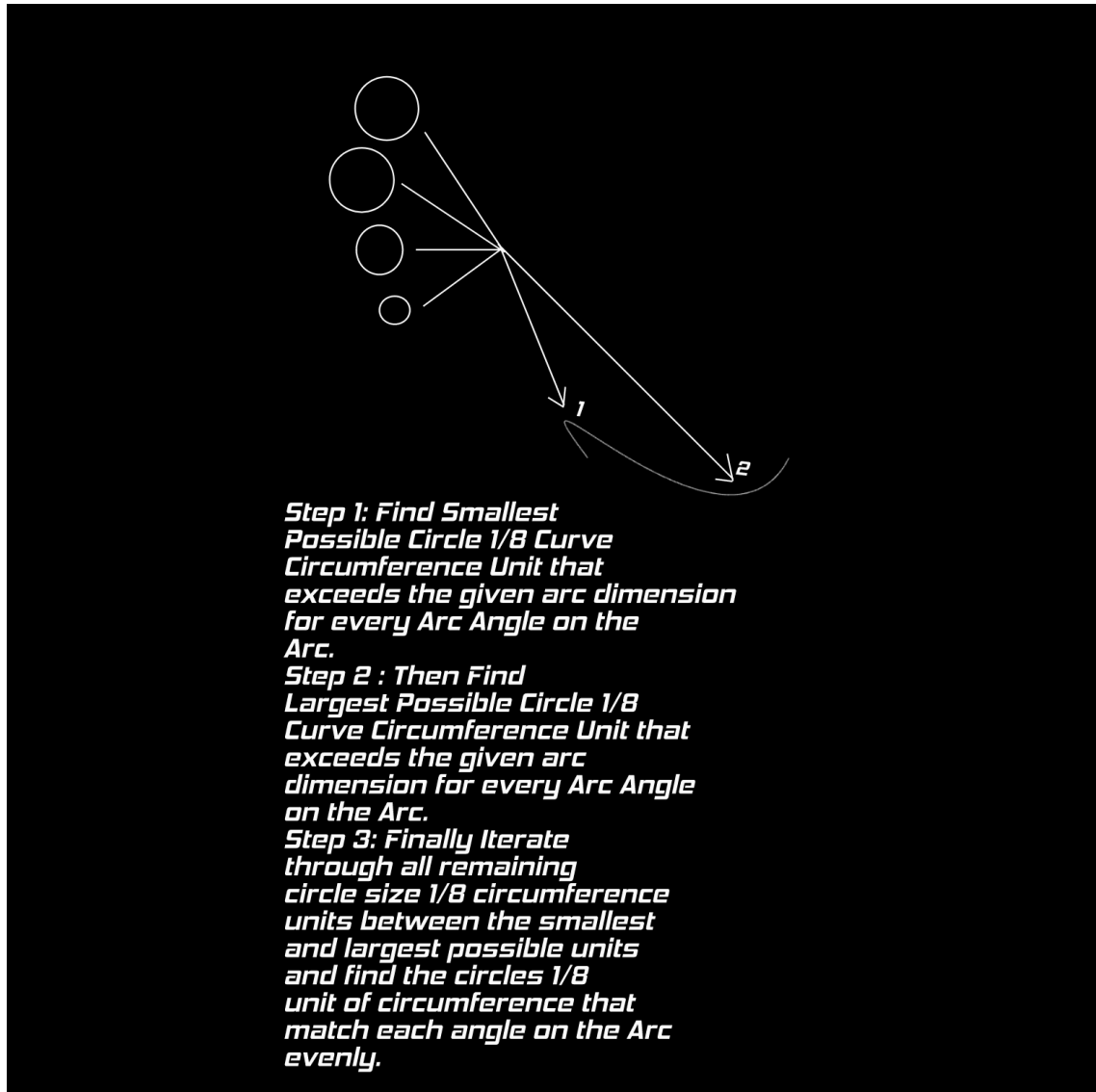
Formula = an,xc,ycn,yn,m

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_n, y_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 slop 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 | | Arc (a) | Curve (x,y) Deviation | | | |
| 34 | | | 2547 | | | |
| 35 | | Curve 1 | | | | |
| 36 | | Curve x | | | | |
| 37 | | 2 | 1 | | Curve 3 | 3 |
| 38 | | | | | Curve 2 | |
| 39 | | | | 2 | | |
| 40 | | | | | | |
| 41 | | | | | | |
| 42 | | Arc (b) | Curve (x,y) Deviation | | | |
| 43 | | | 2547 | | | |
| 44 | | Curve 1 | | | | |
| 45 | | Curve x | | | Curve 3 | |
| 46 | | 2 | 1 | | | 3 |
| 47 | | | | | Curve 2 | |
| 48 | | | | 2 | | |
| 49 | | | | | | |
| 50 | | | | | | |
| 51 | | | | | | |
| 52 | | | | | | |
| 53 | | Arc (c) | Curve (x,y) Deviation | | | |
| 54 | | | 2547 | | | |
| 55 | | Curve 1 | | | | |
| 56 | | Curve x | | | Curve 3 | |
| 57 | | 2 | 1 | | | 3 |
| 58 | | | | | Curve 2 | |
| 59 | | | | 2 | | |
| 60 | | | | | | |
| 61 | | | | | | |
| 62 | | | | | | |
| 63 | | | | | | |
| 64 | Arc (b) | | | | | |
| 65 | Arc Edge: $((x^2+1)/x)$ Iterations and Arc Measure: Formula = a_n, x_c, y_n, y_m | Arc | Condition Min | | | |
| 66 | x input | 2 | TRUE | | | |
| 67 | y input | 99 | Condition Max | | | |
| 68 | z input: $x \text{ input} + y \text{ input} + ((x^2+1)/x)$ | 4.5 | FALSE | | | |
| 69 | Input Additional Curve Injection Parameters (z input: $x \text{ input} + y \text{ input} + ((x^2+1)/x)+1$ | 35 | Condition Min & Max | | | |
| 70 | Quantity of Additional Curve Injections (z input: $x \text{ input} + y \text{ input} + ((x^2+1)/x)+1$ | 3 | FALSE | | | |
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| 73 | Aquire first 0.125 of perfect curve larger than the Arc Curves: ycn | | C18 Min Value | | | |
| 74 | Aquire total circumference Iteration measures between xc and ycn: yn | | Threshold exceeded | | | |
| 75 | Aquire perfect 0.125 match of each curve in the Arc to Each Circumference Iteration 0.125 Match: m | | | | | |
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| 91 | x input | 2 | TRUE | | | |
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| 93 | z input: $x \text{ input} + y \text{ input} + ((x^2+1)/x)$ | 4.5 | FALSE | | | |
| 94 | Input Additional Curve Injection Parameters (z input: $x \text{ input} + y \text{ input} + ((x^2+1)/x)+1$ | 35 | Condition Min & Max | | | |
| 95 | Quantity of Additional Curve Injections (z input: $x \text{ input} + y \text{ input} + ((x^2+1)/x)+1$ | 3 | FALSE | | | |
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| 107 | Sphere Surface | | | | | |
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