



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

Author: Justin Craig Venable Venable.

<https://dartedge.com/radicaledge>

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

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

[Write programming code to shift the balanced opposite 1/8th by raduis square rotational speed where raduis sqaure 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  $y_n$  = 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.