



[calculatoratoz.com](https://www.calculatoratoz.com)



[unitsconverters.com](https://www.unitsconverters.com)

Reuleaux Triangle Formulas

Calculators!

Examples!

Conversions!

Bookmark [calculatoratoz.com](https://www.calculatoratoz.com), [unitsconverters.com](https://www.unitsconverters.com)

Widest Coverage of Calculators and Growing - **30,000+ Calculators!**
Calculate With a Different Unit for Each Variable - **In built Unit Conversion!**
Widest Collection of Measurements and Units - **250+ Measurements!**

Feel free to SHARE this document with your friends!

[Please leave your feedback here...](#)



List of 20 Reuleaux Triangle Formulas

Reuleaux Triangle

Arc Length of Reuleaux Triangle

1) Arc Length of Reuleaux Triangle

$$\text{fx } l_{\text{Arc}} = \frac{\pi \cdot r}{3}$$

[Open Calculator !\[\]\(de95854c7ee024cfadc48187bbb781b2_img.jpg\)](#)

$$\text{ex } 10.47198\text{m} = \frac{\pi \cdot 10\text{m}}{3}$$

2) Arc Length of Reuleaux Triangle given Area

$$\text{fx } l_{\text{Arc}} = \frac{\pi \cdot \sqrt{\frac{2 \cdot A}{\pi - \sqrt{3}}}}{3}$$

[Open Calculator !\[\]\(6a9b39b98eb945faa14c645ec99e4eaa_img.jpg\)](#)

$$\text{ex } 10.43647\text{m} = \frac{\pi \cdot \sqrt{\frac{2 \cdot 70\text{m}^2}{\pi - \sqrt{3}}}}{3}$$

3) Arc Length of Reuleaux Triangle given Edge Length

$$\text{fx } l_{\text{Arc}} = \frac{\pi \cdot l_e}{3}$$

[Open Calculator !\[\]\(f1c5da15572e3e09d343161be98f508d_img.jpg\)](#)

$$\text{ex } 10.47198\text{m} = \frac{\pi \cdot 10\text{m}}{3}$$



4) Arc Length of Reuleaux Triangle given Perimeter

$$fx \quad l_{Arc} = \frac{P}{3}$$

[Open Calculator !\[\]\(cbe80b694ebd74fcfe136a095b608235_img.jpg\)](#)

$$ex \quad 10m = \frac{30m}{3}$$

Area of Reuleaux Triangle

5) Area of Reuleaux Triangle

$$fx \quad A = \left(\pi - \sqrt{3} \right) \cdot \frac{r^2}{2}$$

[Open Calculator !\[\]\(5361750c22c4e047a52f4eac1ec2d4cc_img.jpg\)](#)

$$ex \quad 70.47709m^2 = \left(\pi - \sqrt{3} \right) \cdot \frac{(10m)^2}{2}$$

6) Area of Reuleaux Triangle given Arc Length

$$fx \quad A = \frac{\left(\pi - \sqrt{3} \right) \cdot \left(\frac{3 \cdot l_{Arc}}{\pi} \right)^2}{2}$$

[Open Calculator !\[\]\(b792654f2cef9719eabeb6c5be00811e_img.jpg\)](#)

$$ex \quad 77.76356m^2 = \frac{\left(\pi - \sqrt{3} \right) \cdot \left(\frac{3 \cdot 11m}{\pi} \right)^2}{2}$$



7) Area of Reuleaux Triangle given Edge Length

$$\text{fx } A = \frac{(l_e^2) \cdot \left(\pi - \left(\sqrt{3} \right) \right)}{2}$$

[Open Calculator !\[\]\(e78f798d4ea5c530c9db49e7d26e6b95_img.jpg\)](#)

$$\text{ex } 70.47709\text{m}^2 = \frac{\left((10\text{m})^2 \right) \cdot \left(\pi - \left(\sqrt{3} \right) \right)}{2}$$

8) Area of Reuleaux Triangle given Perimeter

$$\text{fx } A = \frac{\left(\pi - \sqrt{3} \right) \cdot \left(\frac{P}{\pi} \right)^2}{2}$$

[Open Calculator !\[\]\(05be7c7a8995decd503647c99211f7c2_img.jpg\)](#)

$$\text{ex } 64.2674\text{m}^2 = \frac{\left(\pi - \sqrt{3} \right) \cdot \left(\frac{30\text{m}}{\pi} \right)^2}{2}$$

Perimeter of Reuleaux Triangle

9) Perimeter of Reuleaux Triangle

$$\text{fx } P = r \cdot \pi$$

[Open Calculator !\[\]\(626ce8ac21792b9405bfddfea8e0c96a_img.jpg\)](#)

$$\text{ex } 31.41593\text{m} = 10\text{m} \cdot \pi$$

10) Perimeter of Reuleaux Triangle given Arc Length

$$\text{fx } P = (3 \cdot l_{\text{Arc}})$$

[Open Calculator !\[\]\(c1168d6a8b365d11e842ece304635fa7_img.jpg\)](#)

$$\text{ex } 33\text{m} = (3 \cdot 11\text{m})$$



11) Perimeter of Reuleaux Triangle given Area

[Open Calculator !\[\]\(bd1a142de767a21e5362c595f844a4ff_img.jpg\)](#)

$$\text{fx } P = \left(\sqrt{\frac{2 \cdot A}{\pi - \sqrt{3}}} \right) \cdot \pi$$

$$\text{ex } 31.30941\text{m} = \left(\sqrt{\frac{2 \cdot 70\text{m}^2}{\pi - \sqrt{3}}} \right) \cdot \pi$$

12) Perimeter of Reuleaux Triangle given Edge Length

[Open Calculator !\[\]\(830769b31eeeaca920791081939ff8ba_img.jpg\)](#)

$$\text{fx } P = \pi \cdot l_e$$

$$\text{ex } 31.41593\text{m} = \pi \cdot 10\text{m}$$

Radius of Reuleaux Triangle

13) Radius of Reuleaux Triangle

[Open Calculator !\[\]\(bd3b31712ad9bab5a241210fa6925cdd_img.jpg\)](#)

$$\text{fx } r = \frac{l_e}{1}$$

$$\text{ex } 10\text{m} = \frac{10\text{m}}{1}$$

14) Radius of Reuleaux Triangle given Arc Length

[Open Calculator !\[\]\(7bc43b319a082987e20f7bf78f4bab80_img.jpg\)](#)

$$\text{fx } r = \frac{3 \cdot l_{\text{Arc}}}{\pi}$$

$$\text{ex } 10.50423\text{m} = \frac{3 \cdot 11\text{m}}{\pi}$$



15) Radius of Reuleaux Triangle given Area

[Open Calculator !\[\]\(eafc244b53721dd1ec133f0772f70fc7_img.jpg\)](#)

$$\text{fx } r = \sqrt{\frac{2 \cdot A}{\pi - \sqrt{3}}}$$

$$\text{ex } 9.966095\text{m} = \sqrt{\frac{2 \cdot 70\text{m}^2}{\pi - \sqrt{3}}}$$

16) Radius of Reuleaux Triangle given Perimeter

[Open Calculator !\[\]\(10f8862fc183b400327470ea85afe9ae_img.jpg\)](#)

$$\text{fx } r = \frac{P}{\pi}$$

$$\text{ex } 9.549297\text{m} = \frac{30\text{m}}{\pi}$$

Side Length of Reuleaux Triangle

17) Edge Length of Reuleaux Triangle

[Open Calculator !\[\]\(ab4e2b3fc7e7887b7a72f548aa6f5e60_img.jpg\)](#)

$$\text{fx } l_e = \frac{r}{1}$$

$$\text{ex } 10\text{m} = \frac{10\text{m}}{1}$$



18) Edge Length of Reuleaux Triangle given Arc Length

$$\text{fx } l_e = \frac{3 \cdot l_{\text{Arc}}}{\pi}$$

[Open Calculator !\[\]\(9dfdaff1d86ba3c1f8353b4d1b61b8c5_img.jpg\)](#)

$$\text{ex } 10.50423\text{m} = \frac{3 \cdot 11\text{m}}{\pi}$$

19) Edge Length of Reuleaux Triangle given Area

$$\text{fx } l_e = \sqrt{\frac{2 \cdot A}{\pi - \sqrt{3}}}$$

[Open Calculator !\[\]\(2b376d1a92330ab09dad2665d2f89bf5_img.jpg\)](#)

$$\text{ex } 9.966095\text{m} = \sqrt{\frac{2 \cdot 70\text{m}^2}{\pi - \sqrt{3}}}$$

20) Edge Length of Reuleaux Triangle given Perimeter

$$\text{fx } l_e = \frac{P}{\pi}$$

[Open Calculator !\[\]\(c444627dab9fee9a1550c053ffaaaae2_img.jpg\)](#)

$$\text{ex } 9.549297\text{m} = \frac{30\text{m}}{\pi}$$



Variables Used

- **A** Area of Reuleaux Triangle (*Square Meter*)
- **l_{Arc}** Arc Length of Reuleaux Triangle (*Meter*)
- **l_{e}** Edge Length of Reuleaux Triangle (*Meter*)
- **P** Perimeter of Reuleaux Triangle (*Meter*)
- **r** Radius of Reuleaux Triangle (*Meter*)



Constants, Functions, Measurements used

- **Constant:** **pi**, 3.14159265358979323846264338327950288
Archimedes' constant
- **Function:** **sqrt**, sqrt(Number)
Square root function
- **Measurement:** **Length** in Meter (m)
Length Unit Conversion 
- **Measurement:** **Area** in Square Meter (m²)
Area Unit Conversion 



Check other formula lists

- [Annulus Formulas](#)
- [Antiparallelogram Formulas](#)
- [Arrow Hexagon Formulas](#)
- [Astroid Formulas](#)
- [Bulge Formulas](#)
- [Cardioid Formulas](#)
- [Circular Arc Quadrangle Formulas](#)
- [Concave Pentagon Formulas](#)
- [Concave Regular Hexagon Formulas](#)
- [Concave Regular Pentagon Formulas](#)
- [Crossed Rectangle Formulas](#)
- [Cut Rectangle Formulas](#)
- [Cyclic Quadrilateral Formulas](#)
- [Cycloid Formulas](#)
- [Decagon Formulas](#)
- [Dodecagon Formulas](#)
- [Double Cycloid Formulas](#)
- [Fourstar Formulas](#)
- [Frame Formulas](#)
- [Golden Rectangle Formulas](#)
- [Grid Formulas](#)
- [H Shape Formulas](#)
- [Half Yin-Yang Formulas](#)
- [Heart Shape Formulas](#)
- [Hendecagon Formulas](#)
- [Heptagon Formulas](#)
- [Hexadecagon Formulas](#)
- [Hexagon Formulas](#)
- [Hexagram Formulas](#)
- [House Shape Formulas](#)
- [Hyperbola Formulas](#)
- [Hypocycloid Formulas](#)
- [Isosceles Trapezoid Formulas](#)
- [L Shape Formulas](#)
- [Line Formulas](#)
- [N-gon Formulas](#)
- [Nonagon Formulas](#)
- [Octagon Formulas](#)
- [Octagram Formulas](#)
- [Open Frame Formulas](#)
- [Parallelogram Formulas](#)
- [Pentagon Formulas](#)
- [Pentagram Formulas](#)
- [Polygram Formulas](#)
- [Quadrilateral Formulas](#)
- [Quarter Circle Formulas](#)
- [Rectangle Formulas](#)
- [Rectangular Hexagon Formulas](#)
- [Regular Polygon Formulas](#)
- [Reuleaux Triangle Formulas](#)



- Rhombus Formulas 
- Right Trapezoid Formulas 
- Round Corner Formulas 
- Salinon Formulas 
- Semicircle Formulas 
- Sharp Kink Formulas 
- Square Formulas 
- Star of Lakshmi Formulas 
- T Shape Formulas 
- Tangential Quadrilateral Formulas 
- Trapezoid Formulas 
- Tri-equilateral Trapezoid Formulas 
- Truncated Square Formulas 
- Unicursal Hexagram Formulas 
- X Shape Formulas 

Feel free to SHARE this document with your friends!

PDF Available in

[English](#) [Spanish](#) [French](#) [German](#) [Russian](#) [Italian](#) [Portuguese](#) [Polish](#) [Dutch](#)

1/3/2024 | 7:11:54 AM UTC

[Please leave your feedback here...](#)

