calculatoratoz.com

unitsconverters.com

Important Formulas of Equilateral Triangle

Calculators! Examples! Conversions!

Bookmark **calculatoratoz.com**, **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 13 Important Formulas of Equilateral Triangle

Important Formulas of Equilateral Triangle

1) Area of Equilateral Triangle

Open Calculator

fx $$A = \frac{\sqrt{3}}{4} \cdot l_e^2$$

ex $$27.71281\text{m}^2 = \frac{\sqrt{3}}{4} \cdot (8\text{m})^2$$

2) Circumradius of Equilateral Triangle

Open Calculator

fx $$r_c = \frac{l_e}{\sqrt{3}}$$

ex $$4.618802\text{m} = \frac{8\text{m}}{\sqrt{3}}$$

3) Edge Length of Equilateral Triangle given Circumradius

Open Calculator

fx $$l_e = \sqrt{3} \cdot r_c$$

ex $$8.660254\text{m} = \sqrt{3} \cdot 5\text{m}$$

4) Edge Length of Equilateral Triangle given Height

Open Calculator

fx $$l_e = \frac{2 \cdot h}{\sqrt{3}}$$

ex $$8.082904\text{m} = \frac{2 \cdot 7\text{m}}{\sqrt{3}}$$

5) Exradius of Equilateral Triangle

Open Calculator

fx $$r_e = \frac{\sqrt{3}}{2} \cdot l_e$$

ex $$6.928203\text{m} = \frac{\sqrt{3}}{2} \cdot 8\text{m}$$

6) Height of Equilateral Triangle

Open Calculator

fx $$h = \frac{\sqrt{3}}{2} \cdot l_e$$

ex $$6.928203\text{m} = \frac{\sqrt{3}}{2} \cdot 8\text{m}$$

7) Height of Equilateral Triangle given Inradius

Open Calculator

fx $$h = 3 \cdot r_i$$

ex $$6\text{m} = 3 \cdot 2\text{m}$$

8) Inradius of Equilateral Triangle

Open Calculator

fx $$r_i = \frac{l_e}{2 \cdot \sqrt{3}}$$

ex $$2.309401\text{m} = \frac{8\text{m}}{2 \cdot \sqrt{3}}$$

9) Length of Angle Bisector of Equilateral Triangle

Open Calculator

fx $$l_{\text{Angle Bisector}} = \frac{\sqrt{3}}{2} \cdot l_e$$

ex $$6.928203\text{m} = \frac{\sqrt{3}}{2} \cdot 8\text{m}$$

10) Median of Equilateral Triangle

Open Calculator

fx $$M = \frac{\sqrt{3} \cdot l_e}{2}$$

ex $$6.928203\text{m} = \frac{\sqrt{3} \cdot 8\text{m}}{2}$$

11) Perimeter of Equilateral Triangle

Open Calculator

fx $$P = 3 \cdot l_e$$

ex $$24\text{m} = 3 \cdot 8\text{m}$$

12) Semiperimeter of Equilateral Triangle

Open Calculator

fx $$s = \frac{3 \cdot l_e}{2}$$

ex $$12\text{m} = \frac{3 \cdot 8\text{m}}{2}$$

13) Semiperimeter of Equilateral Triangle given Circumradius

Open Calculator

fx $$s = \frac{3 \cdot \sqrt{3}}{2} \cdot r_c$$

ex $$12.99038\text{m} = \frac{3 \cdot \sqrt{3}}{2} \cdot 5\text{m}$$

Variables Used

- **A** Area of Equilateral Triangle *(Square Meter)*
- **h** Height of Equilateral Triangle *(Meter)*
- $l_{\text{Angle Bisector}}$ Length of Angle Bisector of Equilateral Triangle *(Meter)*
- l_e Edge Length of Equilateral Triangle *(Meter)*
- **M** Median of Equilateral Triangle *(Meter)*
- **P** Perimeter of Equilateral Triangle *(Meter)*
- r_c Circumradius of Equilateral Triangle *(Meter)*
- r_e Exradius of Equilateral Triangle *(Meter)*
- r_i Inradius of Equilateral Triangle *(Meter)*
- **s** Semiperimeter of Equilateral Triangle *(Meter)*

Constants, Functions, Measurements used

- 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

- Equilateral Triangle Formulas
- Isosceles Right Triangle Formulas
- Isosceles Triangle Formulas
- Right Angled Triangle Formulas
- Scalene Triangle Formulas
- Triangle Formulas

Feel free to SHARE this document with your friends!

PDF Available in

English Spanish French German Russian Italian Portuguese Polish Dutch

11/24/2023 | 7:58:34 AM UTC

Please leave your feedback here...