calculatoratoz.com

unitsconverters.com

Equilateral Square Pyramid Formulas

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 10 Equilateral Square Pyramid Formulas

Equilateral Square Pyramid

1) Edge Length of Equilateral Square Pyramid given Height

Open Calculator

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

ex $9.899495\text{m} = 7\text{m} \cdot \sqrt{2}$

2) Edge Length of Equilateral Square Pyramid given Surface Area

Open Calculator

fx $l_e = \left(\frac{TSA}{1+\sqrt{3}}\right)^{\frac{1}{2}}$

ex $9.94117\text{m} = \left(\frac{270\text{m}^2}{1+\sqrt{3}}\right)^{\frac{1}{2}}$

3) Edge Length of Equilateral Square Pyramid given Volume

Open Calculator

fx $l_e = \left(\frac{6 \cdot V}{\sqrt{2}}\right)^{\frac{1}{3}}$

ex $9.990059\text{m} = \left(\frac{6 \cdot 235\text{m}^3}{\sqrt{2}}\right)^{\frac{1}{3}}$

4) Height of Equilateral Pyramid given TSA

Open Calculator

fx $$h = \left(\frac{1}{\sqrt{2}}\right) \cdot \left(\frac{TSA}{1+\sqrt{3}}\right)^{\frac{1}{2}}$$

ex $$7.029469\text{m} = \left(\frac{1}{\sqrt{2}}\right) \cdot \left(\frac{270\text{m}^2}{1+\sqrt{3}}\right)^{\frac{1}{2}}$$

5) Height of Equilateral Square Pyramid

Open Calculator

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

ex $$7.071068\text{m} = \frac{10\text{m}}{\sqrt{2}}$$

6) Height of Equilateral Square Pyramid given Volume

Open Calculator

fx $$h = \left(\frac{3 \cdot V}{3}\right)^{\frac{1}{3}}$$

ex $$6.171006\text{m} = \left(\frac{3 \cdot 235\text{m}^3}{3}\right)^{\frac{1}{3}}$$

7) Total Surface Area of Equilateral Square Pyramid

Open Calculator

fx $$\mathrm{TSA} = \left(1+\sqrt{3}\right)\cdot \mathrm{l_e^2}$$

ex $$273.2051\mathrm{m^2} = \left(1+\sqrt{3}\right)\cdot (10\mathrm{m})^2$$

8) Volume of Equilateral Square Pyramid

Open Calculator

fx $$\mathrm{V} = \frac{\sqrt{2}}{6}\cdot \mathrm{l_e^3}$$

ex $$235.7023\mathrm{m^3} = \frac{\sqrt{2}}{6}\cdot (10\mathrm{m})^3$$

9) Volume of Equilateral Square Pyramid given Height

Open Calculator

fx $$\mathrm{V} = \left(\frac{2}{3}\right)\cdot \mathrm{h}^3$$

ex $$228.6667\mathrm{m^3} = \left(\frac{2}{3}\right)\cdot (7\mathrm{m})^3$$

10) Volume of Equilateral Square Pyramid given Surface Area

Open Calculator

fx $$\mathrm{V} = \left(\frac{\sqrt{2}}{6}\right)\cdot \left(\frac{\mathrm{TSA}}{1+\sqrt{3}}\right)^{\frac{3}{2}}$$

ex $$231.5668\mathrm{m^3} = \left(\frac{\sqrt{2}}{6}\right)\cdot \left(\frac{270\mathrm{m^2}}{1+\sqrt{3}}\right)^{\frac{3}{2}}$$

Variables Used

- **h** Height of Equilateral Square Pyramid *(Meter)*
- $\mathbf{l_e}$ Edge Length of Equilateral Square Pyramid *(Meter)*
- **TSA** Total Surface Area of Equilateral Square Pyramid *(Square Meter)*
- **V** Volume of Equilateral Square Pyramid *(Cubic Meter)*

Constants, Functions, Measurements used

- Function: **sqrt**, sqrt(Number)
  A square root function is a function that takes a non-negative number as an input and returns the square root of the given input number.
- Measurement: **Length** in Meter (m)
  Length Unit Conversion
- Measurement: **Volume** in Cubic Meter (m^3)
  Volume Unit Conversion
- Measurement: **Area** in Square Meter (m^2)
  Area Unit Conversion

Check other formula lists

- **Equilateral Square Pyramid Formulas**
- **Regular Square Pyramid Formulas**
- **Right Square Pyramid Formulas**

Feel free to SHARE this document with your friends!

PDF Available in

English Spanish French German Russian Italian Portuguese Polish Dutch

6/24/2024 | 6:10:08 AM UTC *Please leave your feedback here...*