**Harold’s Geometry Shape Formulas**

**Cheat Sheet**

25 April 2025

**Perimeter, Area, Surface Area, and Volume**

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| **2D Shapes** | **Perimeter**  **(P, C)** | **Area**  **(A)** | **3D Shapes** | **Surface Area**  **(SA)** | **Volume**  **(V)** |
| **Units** | Units | Units2 |  | Units2 | Units3 |
| **Example** | Fence | Pasture |  | Paint It | Fill It |
| **Triangle** |  |  | **Triangular Prism** |  |  |
| **Square** |  |  | **Cube** |  |  |
| **Rectangle** |  |  | **Rectangular Prism** |  |  |
| **Parallelogram** |  |  | **Pyramid** | : lateral area |  |
| **Trapezoid** |  |  | **Cone** |  |  |
| **Rhombus** |  |  | **Cylinder** |  |  |
| **Regular Polygon** |  | *:* apothem  *:* number of sides | **Regular Prism** |  |  |
| **Circle** |  |  | **Sphere** |  |  |
| **Circular Sector** |  |  | **Spherical Segment** | : height of segment |  |
| **Ellipse** |  |  | **Ellipsoid**  7: Geometric definition of an ellipsoid; a, b and c denote the three... |  Download Scientific Diagram | See [Knud Thomsen’s Formula](https://www.web-formulas.com/Math_Formulas/Geometry_Surface_of_Ellipsoid.aspx) |  |

**Sources:**

* TPT, <https://www.teacherspayteachers.com/Product/Perimeter-Area-Surface-Area-Volume-Cheat-Sheet-7377920>