Geometry Formulas Cheat Sheet

1. Area Formulas

- Square: $A = a^2$ (where a is the side length)

- Rectangle: $A = l \times w$ (where l and w are the length and width)

- Triangle: $A = 1/2 \times b \times h$ (where b is base, h is height)

- Circle: $A = \pi r^2$ (where r is the radius)

- Trapezoid: $A = 1/2 (a + b) h$ (where a and b are the lengths of the parallel sides, h is the height)

2. Perimeter Formulas

- Square: $P = 4a$

- Rectangle: $P = 2(l + w)$

- Triangle: $P = a + b + c$ (where a, b, and c are the sides of the triangle)

- Circle: $P = 2 \pi r$

3. Volume Formulas

- Cube: $V = a^3$

- Rectangular Prism: $V = l \times w \times h$

- Sphere: $V = 4/3 \pi r^3$

- Cylinder: $V = \pi r^2 h$

- Cone: $V = 1/3 \pi r^2 h$

4. Surface Area Formulas

- Cube: $SA = 6a^2$

- Rectangular Prism: $SA = 2(lw + lh + wh)$

- Sphere: $SA = 4 \pi r^2$

- Cylinder: $SA = 2 \pi r (r + h)$

- Cone: $SA = \pi r (r + \sqrt{r^2 + h^2})$