Euler's Polyhedral Formula	$F + V = E + 2$	F: Face V: Vertex E: Edge
Sum of interior angles of a regular polygon	$S_i = (n-2) \times 180^o$	n: Number of sides
Pythagorean theorem	$H^2 = C_1^2 + C_2^2$	Hypotenuse: H Leg: C_1 e C_2
Distance between two points	$\overline{AB} = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$	ex: $A(8,2)$ e $B(4,-1)$ $\overline{AB} = \sqrt{(8-4)^2 + (2+1)^2} \Leftrightarrow$ $\overline{AB} = \sqrt{16+9} \Leftrightarrow \overline{AB} = 5$
Midpoints	$M\left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2}\right)$	ex: $A(2,6)$ e $B(4,-2)$ $M\left(\frac{2+4}{2}, \frac{6-2}{2}\right) \Leftrightarrow M(3,2)$
Equation of a straight line	Slope–intercept form Slope: m, Y intercept: b	$y = mx + b$
	Vector Form Direction vector: $\vec{u}(u_1, u_2, u_3)$ Point(x_0, y_0, z_0)	$(x, y, z) = (x_0, y_0, z_0) + k(u_1, u_2, u_3), k \in \mathbb{R}$
	Cartesian Form Direction vector: $\vec{u}(u_1, u_2, u_3)$ Point(x_0, y_0, z_0)	$\frac{x - x_0}{u_1} = \frac{y - y_0}{u_2} = \frac{z - z_0}{u_3}$
	Parametric Form Direction vector: $\vec{u}(u_1, u_2, u_3)$ Point(x_0, y_0, z_0)	$\begin{cases} x = x_0 + Ku_1 \\ y = y_0 + Ku_2 \\ z = z_0 + Ku_3 \end{cases}, k \in \mathbb{R}$
Equation of a plane	Cartesian Form Normal vector: $\vec{u}(n_1, n_2, n_3)$ Point(x_0, y_0, z_0)	$n_1(x - x_0) + n_2(y - y_0) + n_3(z - z_0) = 0$
	Scalar Form Normal vector: $\vec{u}(n_1, n_2, n_3)$	$n_1 x + n_2 y + n_3 z + d = 0$
Equation of a circle	Center (x_0, y_0) and radius r	$(x - x_0)^2 + (y - y_0)^2 = r^2$
Equation of a Sphere	Center (x_0, y_0, z_0) and radius r	$(x - x_0)^2 + (y - y_0)^2 + (z - z_0)^2 = r^2$
Equation of an Ellipse	Center (h, k) Axis a and b	$\left(\frac{x-h}{a}\right)^2 + \left(\frac{y-k}{b}\right)^2 = 1$