Volume of Tetrahedron.

Volume of tetrahedron with vertices (x_r, y_r, z_r); r = 1, 2, 3, 4, is $V = \dfrac{1}{6} \begin{vmatrix} x_1 & y_1 & z_1 & 1 \\ x_2 & y_2 & z_2 & 1 \\ x_3 & y_3 & z_3 & 1 \\ x_4 & y_4 & z_4 & 1 \end{vmatrix}$