TEX document #4

$$\overline{x} = x_{\text{cm}} = \frac{\iiint_E \rho(x, y, z)\, x\, dV}{M} \, ,$$

$$\overline{y} = \frac{\iiint_E \rho(x, y, z)\, y\, dV}{M} \, , \qquad \overline{z} = \frac{\iiint_E \rho(x, y, z)\, z\, dV}{M} \, .$$

$$\overline{x} = \frac{\iiint_E x\, dV}{\iiint_E dV} = \frac{\iiint_E x\, dV}{\text{Volume of } E} \, , \qquad \text{etc.}$$