$$= \frac{1}{\left|1-\frac{1}{2}\right|} = \frac{1}{1/2} = 2$$

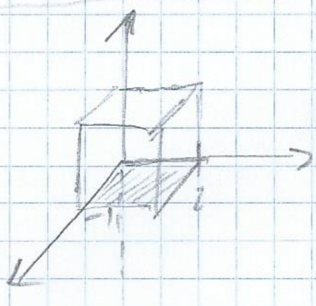
$$\int_0^1 \int_0^u 2\,\text{sen}\,u \cos v \; dv\, du = \int_0^1 2\,\text{sen}\,u \left[\text{sen}\,v\right]_0^u du =$$

$$= \int_0^1 2\,\text{sen}\,u\,\text{sen}\,u\; du = \int_0^1 2\,\text{sen}^2 u\; du = \int_0^1 \frac{1-\cos(2u)}{2}\, du$$

$$= \left[\frac{1}{2}u - \frac{\text{sen}\,(2u)}{4}\right]_0^1 = \frac{1}{2} - \frac{\text{sen}\,2}{4}$$

(1, 2, 3, 5, 7 e 8 → Met para exame)

$$\underbrace{\int_{-1}^{1} \underbrace{\int_0^2 \underbrace{\int_0^1 (x^2+y^2+z^2)\, dx}_{1º}\, dy}_{2º}\, dz}_{3º} =$$



$$= \int_{-1}^{1}\int_0^2 \left(\frac{x^3}{3} + y^2x + z^2x\right)_0^1 dy\, dz =$$

$$= \int_{-1}^{1}\int_0^2 \left(\frac{1}{3} + y^2 + z^2\right) dy\, dz =$$

$$= \int_{-1}^{1} \left(\frac{1}{3}y + \frac{y^3}{3} + z^2 y\right)_0^2 dz =$$

$$= \int_{-1}^{1} \left(\frac{2}{3} + \frac{8}{3} + 2z^2\right) dz = \ldots$$