

917.

$$\text{Visa att: } \int_0^a dx \int_0^x dy \int_0^y dz \int_0^z f(u) du = \int_0^a \frac{(a-t)^3}{3!} f(t) dt$$

$$\text{V.L.} = \int_{u=0}^a f(u) \left(\int_{z=u}^a \left(\int_{y=z}^a \left(\int_{x=y}^a dx \right) dy \right) dz \right) du$$

$$\text{V.L.} = \int_{u=0}^a f(u) \left(\int_{z=u}^a \left(\int_{y=z}^a (a-y) dy \right) dz \right) du$$

$$V.L. = \int_{u=0}^a f(u) \left(\int_{z=u}^a \frac{(a-z)^2}{2} dz \right) du$$

$$V.L. = \int_{u=0}^a f(u) \frac{(a-u)^3}{2 \cdot 3} du$$

$$V.L. = H.L. \text{ vsv } .$$