

Opgave 9.5.11

Evaluate

$$\int_1^2 \int_0^5 (x^4 y + y) \, dx \, dy$$

— s. 558

Udregn

$$\begin{aligned} & \int_1^2 \int_0^5 (x^4 y + y) \, dx \, dy \\ & \int_1^2 \left[\frac{1}{5} x^5 y + yx \right]_0^5 dy \\ & \int_1^2 630y \, dy \\ & \left[315y^2 \right]_1^2 \\ & 1260 - 315 \\ & 945 \end{aligned}$$