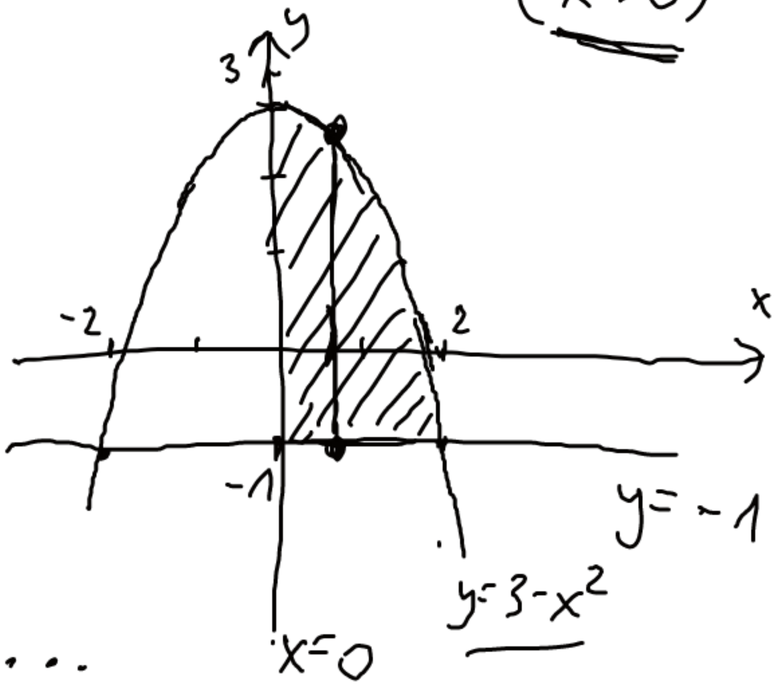
$$\iint_D (xy+x)\,dx\,dy = \int_0^2 dx \int_{-1}^{3-x^2} (xy+x)\,dy =$$

D: $x=0$, $y=-1$, $y=3-x^2$ $(x \geq 0)$



$$= \int_0^2 dx \left(x\frac{y^2}{2} + xy \right)\Big|_{y=-1}^{y=3-x^2} =$$

$$= \int_0^2 \left(x\frac{(3-x^2)^2}{2} + x(3-x^2) - \left(\frac{x}{2} + (-x) \right) \right) dx = \ldots$$