4D

$\rho(x;y)$

D: $y = 7x^2$ $x = 0$ $x = 1$ $y = -2x$

$p(x,y) = 7x + y$

$$S = \int_0^1 (7x^2 + 2x)dx = \int_0^1 7x^2 dx + 2\int_0^1 x dx = \left(\frac{7}{3}x^3 + \frac{2}{2}x^2\right)\Big|_0^1 = \frac{10}{3}$$

$$p(x,y)\cdot(7x+y) = 7x - 2x = 5x\Big|_0^1 = 5$$

$m = S\rho \cdot h \Rightarrow m = 50/3$