$$\int_0^3 \int_0^{x^2} 3x\cos(y)\,dy\,dx \quad = \int_0^3 \left[3x\sin(y)\right]_{y=0}^{y=x^2}\,dx = \int_0^3 3x\sin(x^2)\,dx$$
$$= -\tfrac{3}{2}\cos(x^2)\Big]_0^3 = \tfrac{3}{2}(1 - \cos(9))$$