Double Integrals Tutorial Exercise 1

Calculate the double integral of the function $f(x, y) = x \cdot y$ in the area surrounded by the curves:

$$y_1(x)=0,$$

$$y_2(x) = \sqrt{x}, \qquad x_1 = 0, \qquad x_2 = 2.$$

$$x_1 = 0$$
,

$$x_2 = 2$$