

theoretical joint distributions

exercise 5

Find the marginal pdf $f(x)$ and $f(y)$ given the joint pdf:

$$f(x, y) = \begin{cases} x + \frac{3}{2}y^2 & \text{for } 0 \leq x \leq 1, 0 \leq y \leq 1 \\ 0 & \text{otherwise} \end{cases}$$

some continuous random variables and their pdfs

uniform distribution $X \sim \text{Unif}(a, b)$

