

Strict submission deadline: 5 May 2025 at 08:00 am

Exercise #1

Task 1.1

Solve Task 2.1.2 of the “Exercises 2025” provided on the course page.

Provide on drawing each for parts a and b.

Task 1.2

Solve Task 1.3.8 of the “Exercises 2025” provided on the course page.

Submit the calculation path and the solution.

Task 1.3

Solve Task 4.1 of the “Exercises 2025” provided on the course page.

Submit the solutions (Matlab source code, printed plots, written answers, and sketches)

Task 1.4

Given the joint density function

$$f_{xy}(x, y) = \begin{cases} 2 & \text{for } x \geq 0, y \geq 0 \text{ and } x + y \leq 1 \\ 0 & \text{elsewhere} \end{cases}$$

Calculate $f_x(x)$, $f_y(y)$, $F_{xy}(x, y)$, $F_x(x)$, $F_y(y)$

Don't submit the solution! It's just for practicing. How do you want to solve it without reading the solution in the script? No submission!