

Assignment-10

Problem-1: Suppose that the temperature of a rectangular heated plate is described by the following function:

$$T(x, y) = 2xy + 2x - x^2 - 2y^2 + 72 \quad (1)$$

If the plate is 8-m long (x-direction) and 6-m wide(y-direction), compute the average temperature using various methods for integration. Compare your results with the analytical one to find the most accurate average temperature. Prepare a note on this and submit it in the lab.