Exercise 1 *Find the average height of the paraboloid $z = x^2 + y^2$ over the region*

$$D = \{(x, y) : 0 \leq x \leq 1, 0 \leq y \leq 2\}$$

Exercise 2 *Find the area of the region enclosed by the positive x-axis (polar line) and spiral $r = \frac{4}{3}\theta$, $0 \leq \theta \leq 2\pi$.*