The solution to the problem should start in this page.

1.— In the metric space (\mathbb{R}^2, d_2) (Euclidean distance), we consider the set A of points such that the ordinate of each point is between 0 and 1 (both inclusive), while its abscissa is between 0 and the value of its ordinate (both inclusive).

- a) Write the mathematical expression that defines the set and draw it.
- b) Obtain the sets Closure, Isolated points, Derived, Interior, Boundary and Exterior.
- c) Justify if the set is open, closed, bounded, compact.