Activity 4.4: Contextual Situations. Applications of the Definite Integral

During the whole semester, for every new technique of integration, some applications or situations were learned, but this activity was completely different.

This practice consisted in graphing the original function to get signs and integrating in order to replace values and obtain either the displacement or the total distance of the particle. The number of integrals on the distance equation, depended on the number of curves the graph had, so according to almost everyone, this was the difficult part of the process.

The truth is that I've never been good when it comes to graphs, especially of trigonometric functions, so according to me, this was the challenging part. For this reason, before starting the practice I stressed out so much but I realized these problems just needed the sketch of the graph because the thing that mattered was replacing the correct values and signs. Therefore I learned to analyze what the problem is actually asking for and identify valuable information.