

# Steiner problem

Solve the following optimization problem

In the plane of a triangle, find a point such that the sum of its distances to the vertices of the triangle is minimum (the coordinates of the triangle are known)

$$\min_{X,Y} d_1 + d_2 + d_3$$

$$d_i^2 = (x_i - X)^2 + (y_i - Y)^2$$

