



Consider fish 1 and fish 2.

At t , let their position are (x_1, y_1) and (x_2, y_2)

At $t+1$, let their positions are (x_1', y_1') and (x_2', y_2')

Then, obj func at t , $f_t = \sqrt{x_1^2 + y_1^2} + \sqrt{x_2^2 + y_2^2}$

obj func at $t+1$, $f_{t+1} = \sqrt{x_1'^2 + y_1'^2} + \sqrt{x_2'^2 + y_2'^2}$

Confusion: Is following correct according to question ??

$$\delta(f_1) = \sqrt{x_1'^2 + y_1'^2} - \sqrt{x_1^2 + y_1^2}$$

$$\delta(f_2) = \sqrt{x_2'^2 + y_2'^2} - \sqrt{x_2^2 + y_2^2}$$

$$\max(\delta(f_i)) = \max(\delta(f_1), \delta(f_2))$$