Find *x*1, *x*2, *x*3 to minimize  (α ≥ 1)

Note that || ||*α* means the *Lα* norm





When α ≥ 1, the *Lα* norm is convex and can be optimized by the gradient descend.

Length(y[n]) = N > 3

Ex: 

, ,



Minimize  is equivalent to minimize



Initial: [*x*1, *x*2, *x*3] = 0, 0, 0]





where 

 

 

Gradient descend method:

