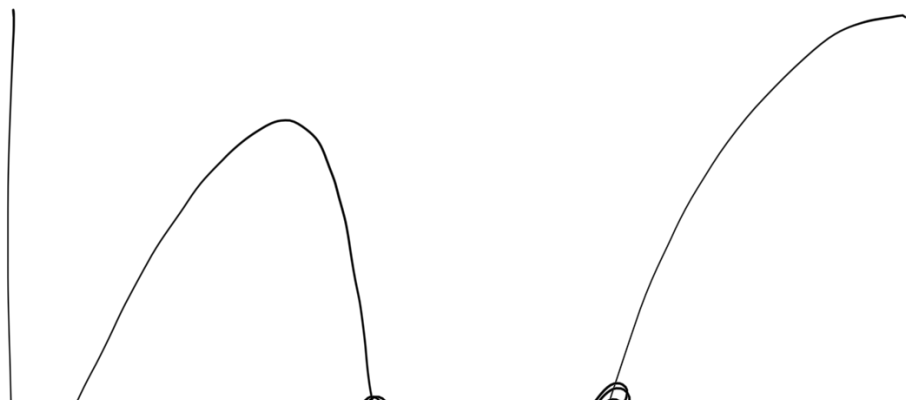
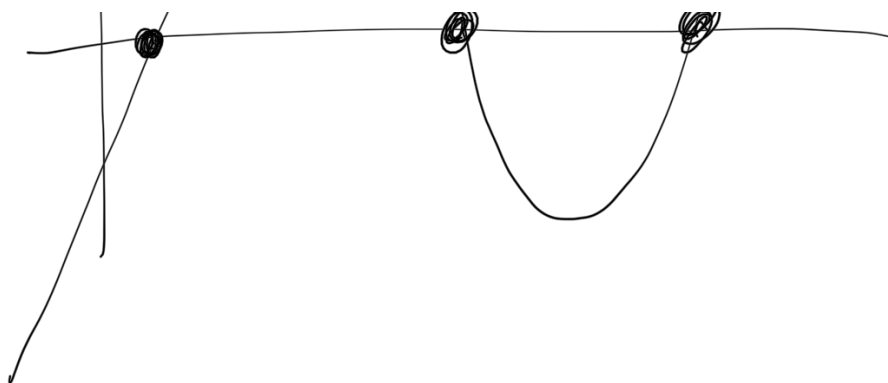


Phys 421 / PCSE 503
Lecture III

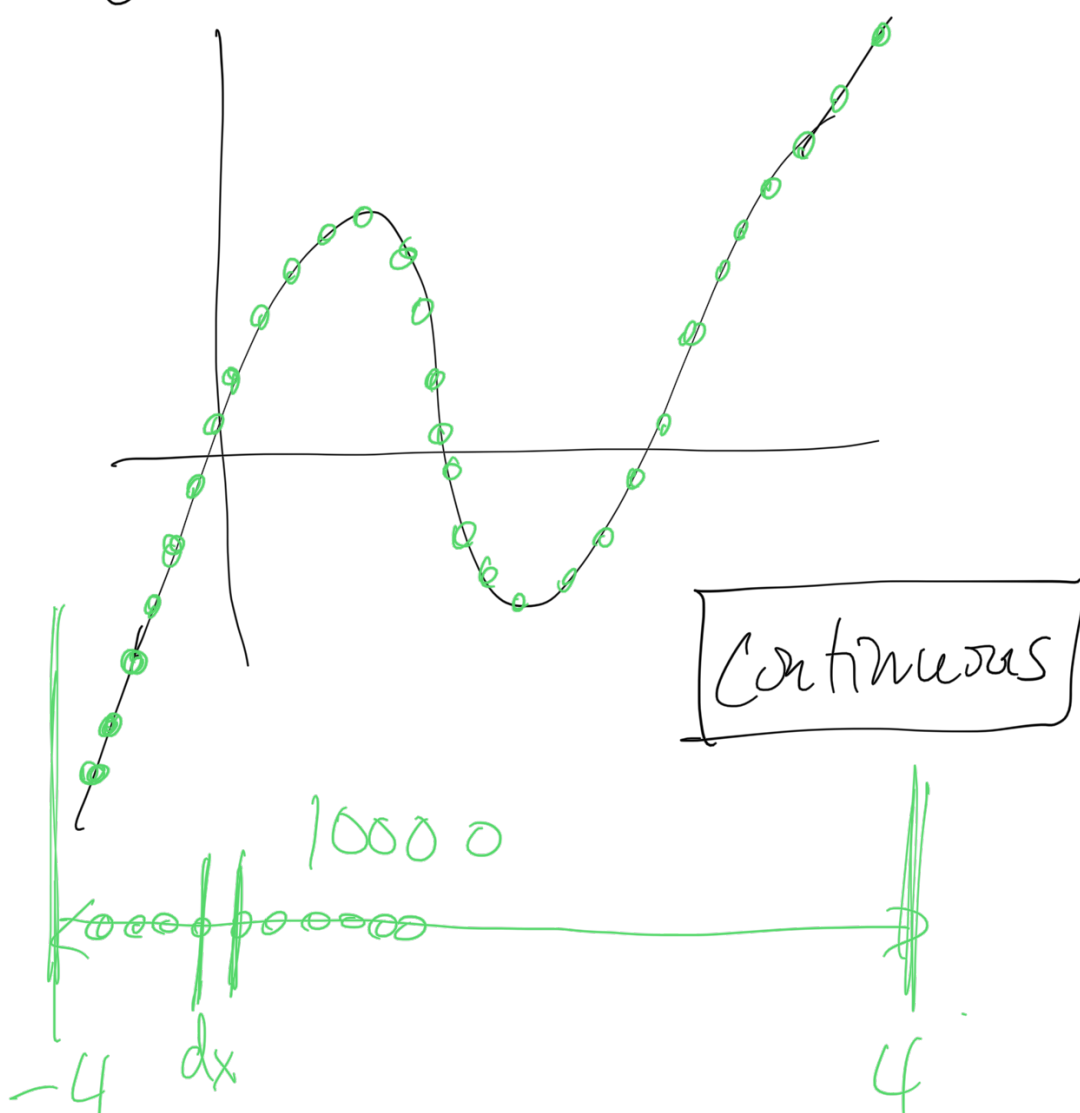
- ① Git Hub , Google Colaboratory
- ② Root Finding

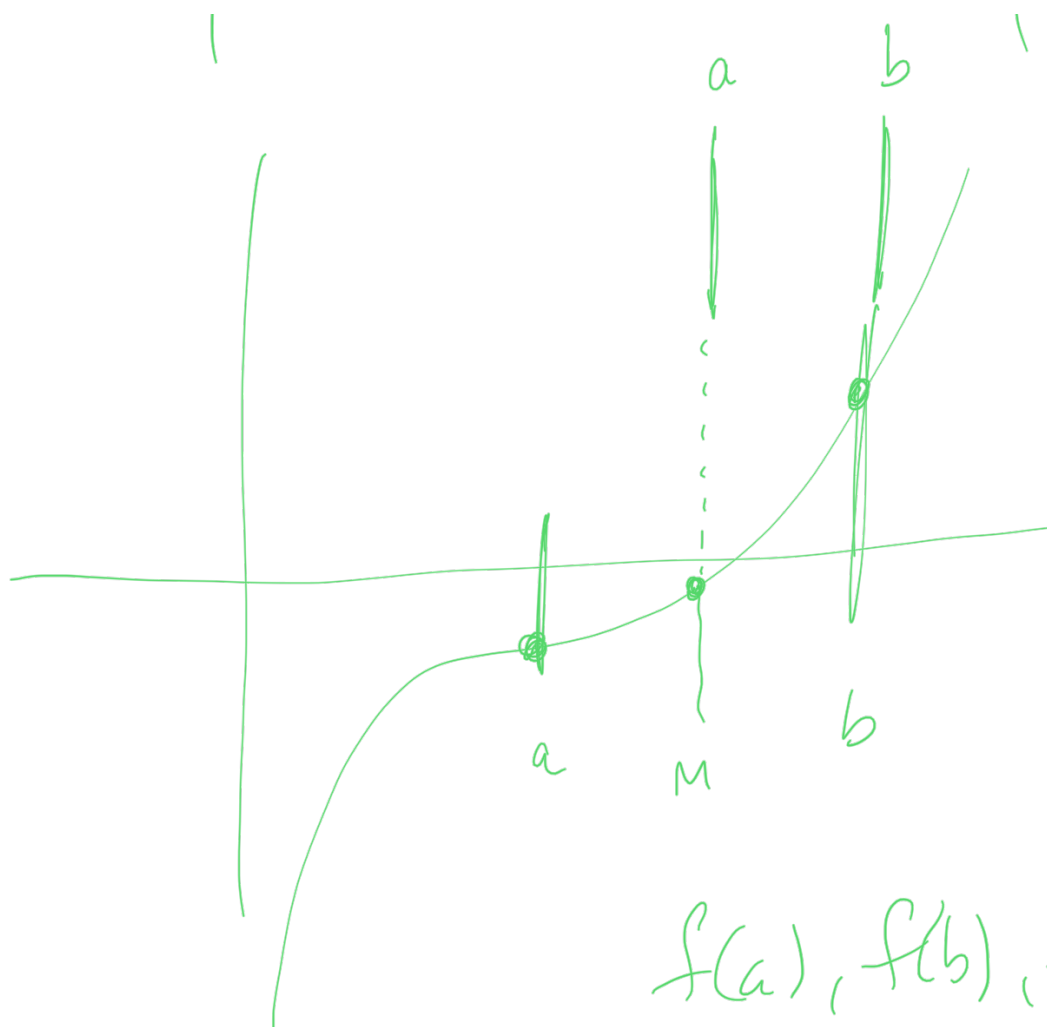
phys 421





$$y = -3 - 3x + 3x^2 + x^3$$



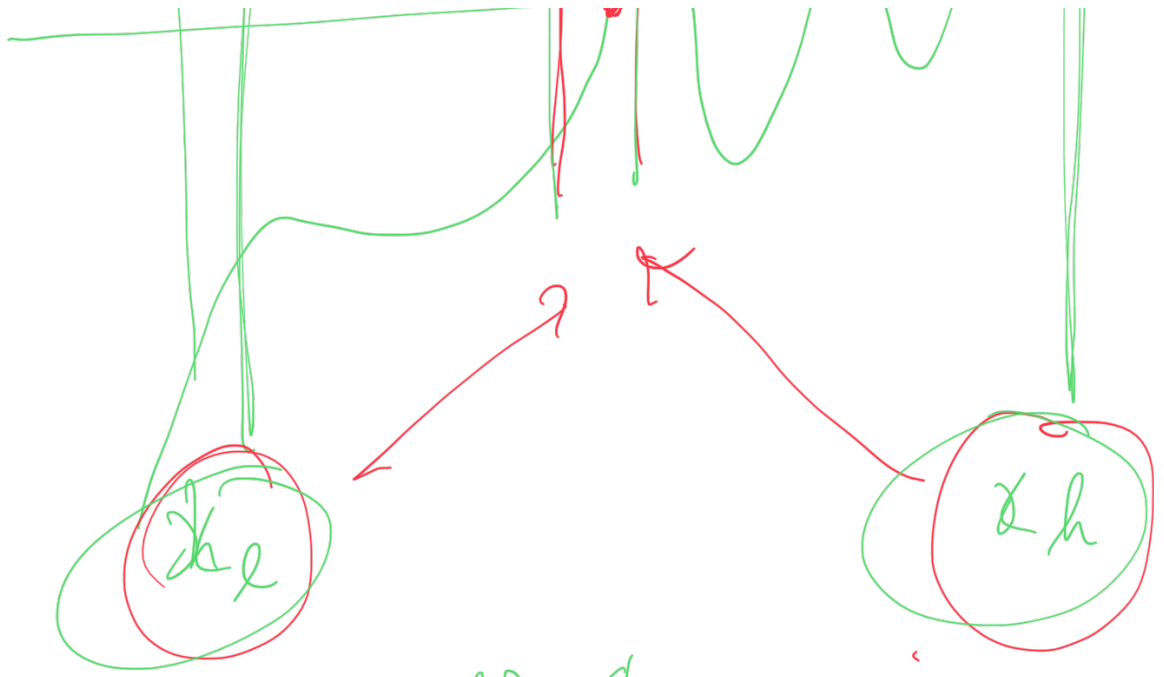


$$f(a), f(b), f(m)$$

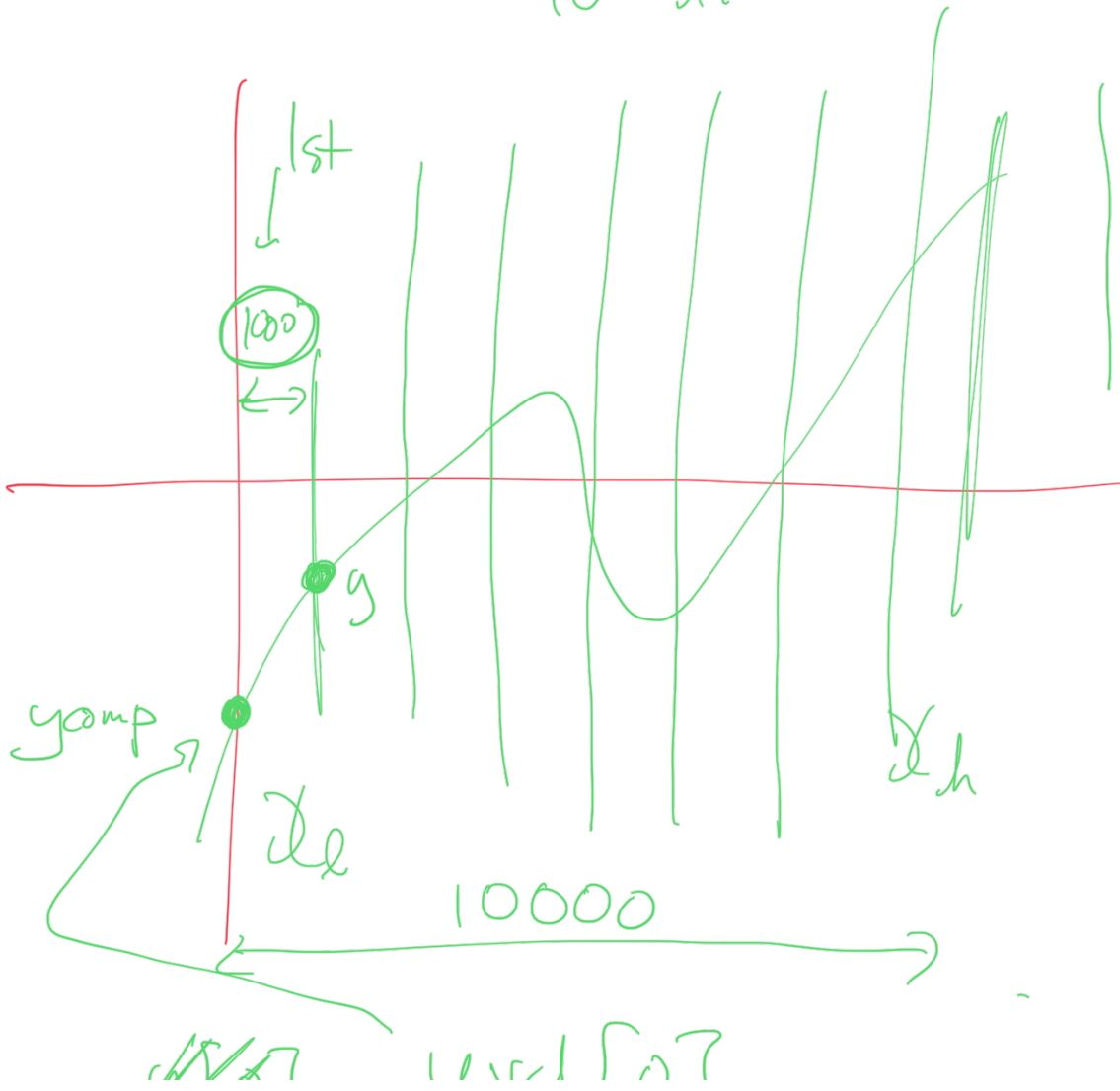
$$f(a) \cdot f(m) > 0$$

$$\rightarrow f(b) \cdot f(m) < 0$$

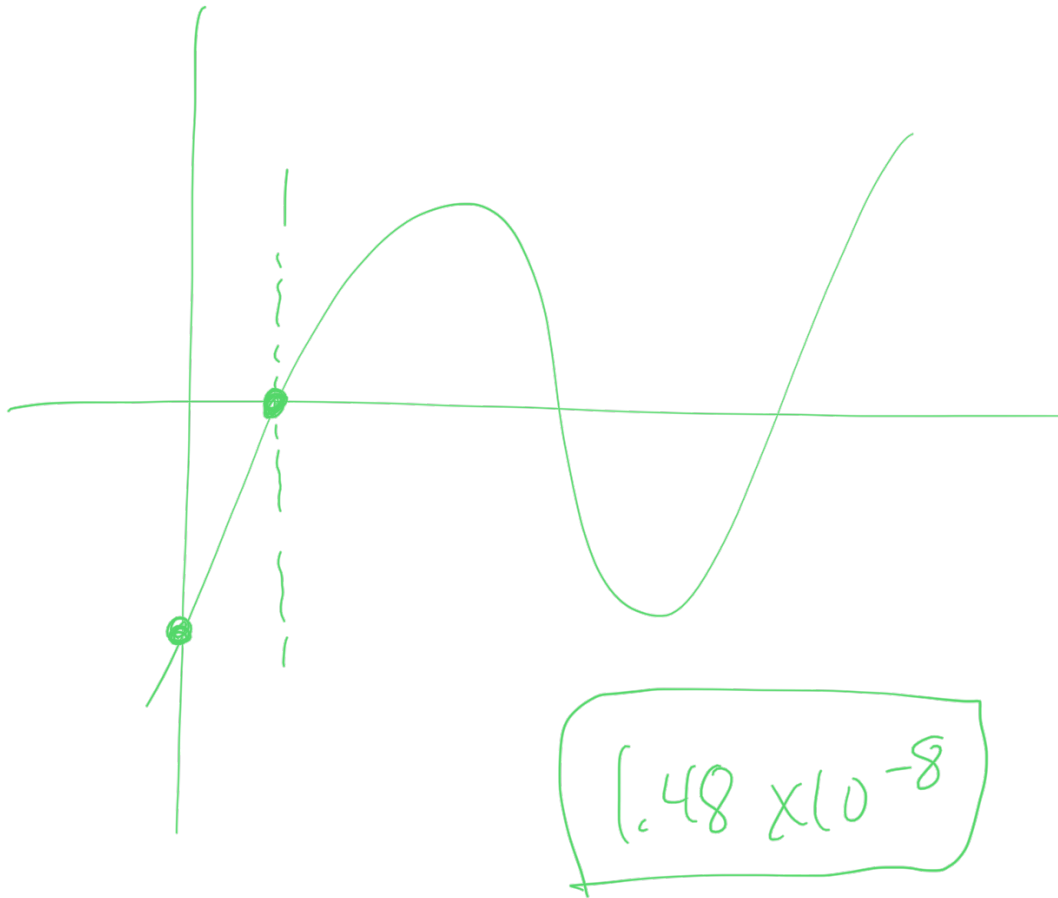


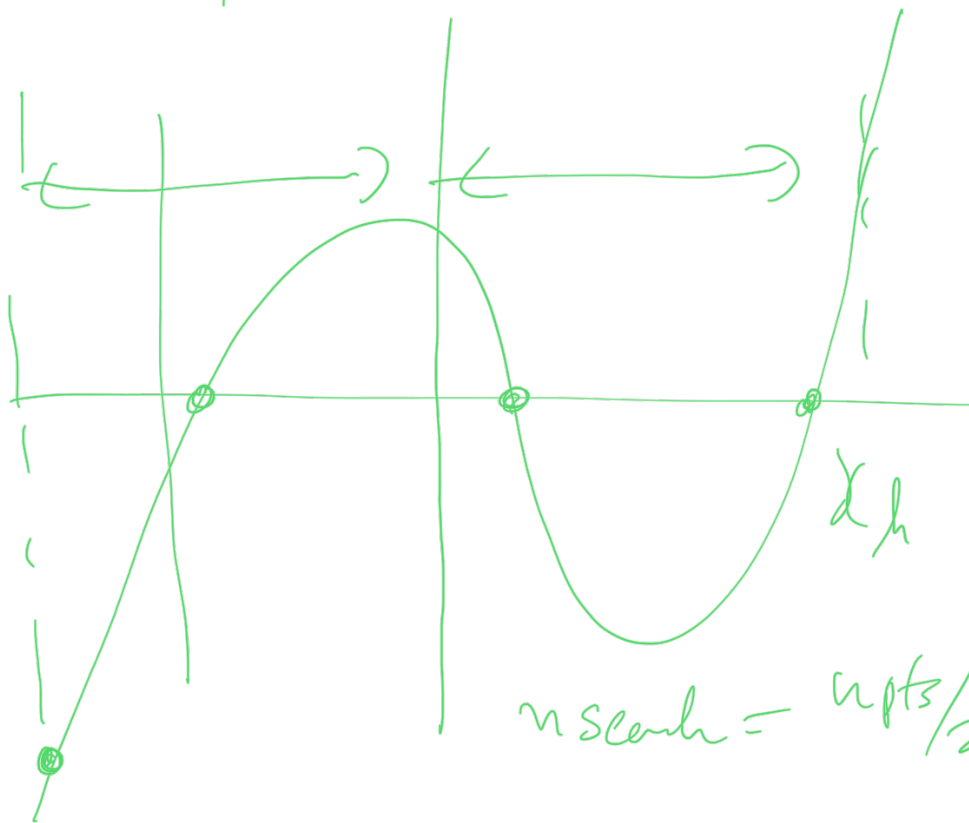
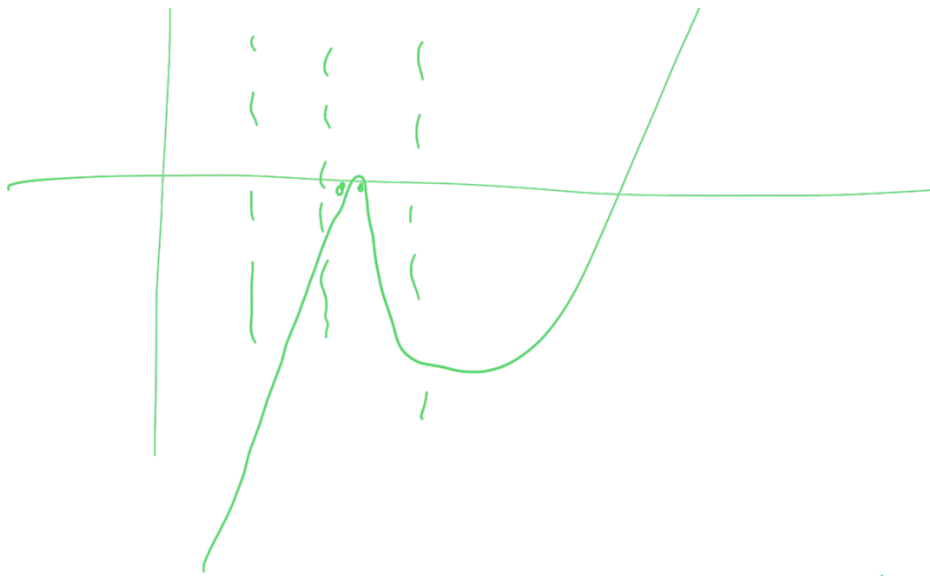


10 slices



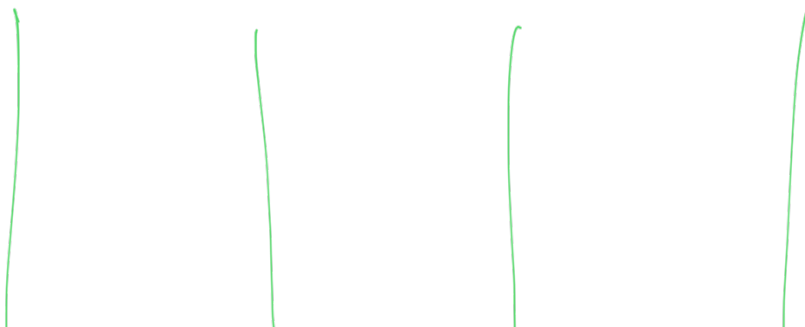
yes yes





$$n_{search} = n_{pts}/2$$

x_0



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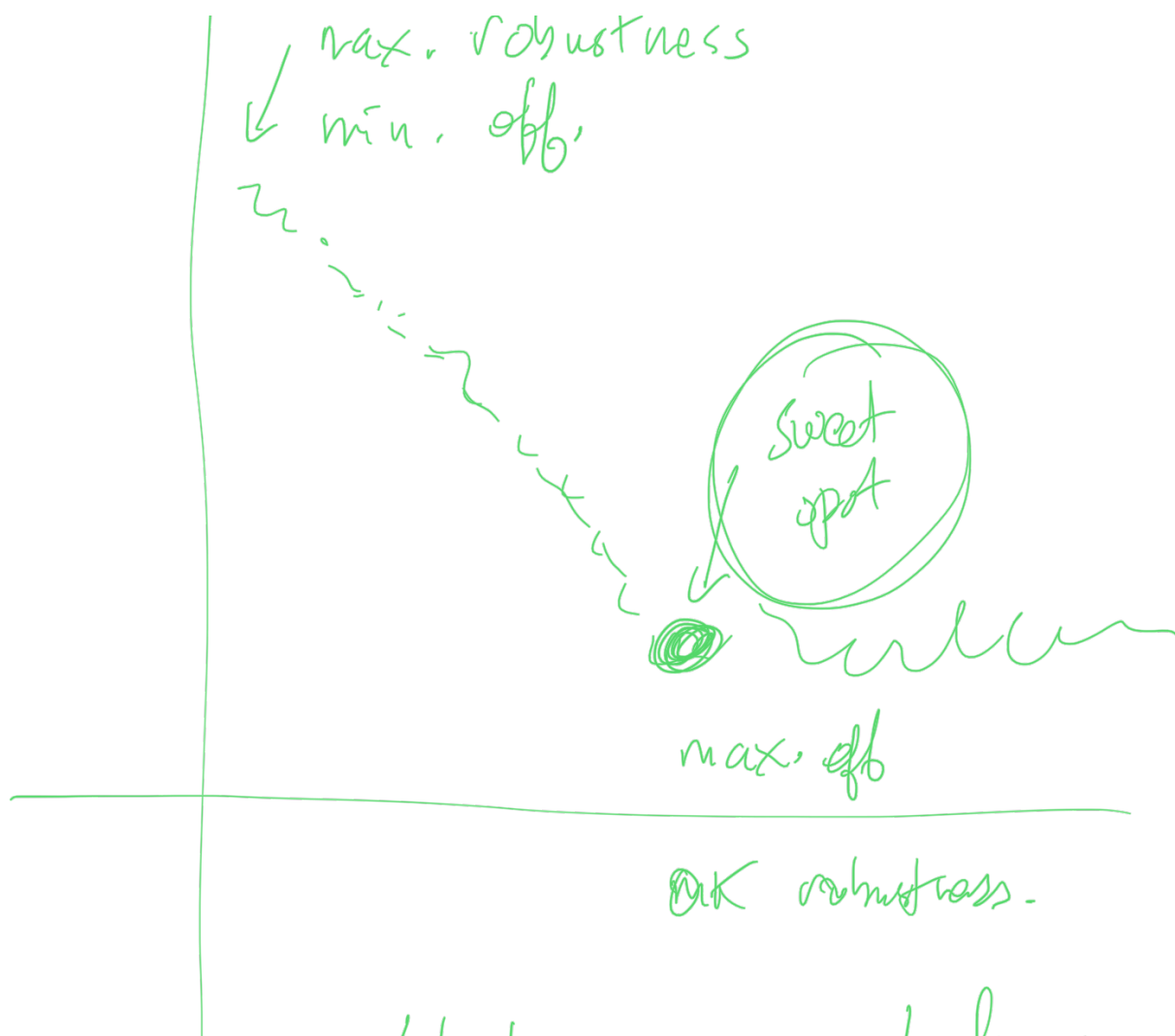
n pts

(

$$\uparrow n_{\text{search}} = 1$$

1

1



4 hrs vs. 1 hour
4 days vs. 1 day