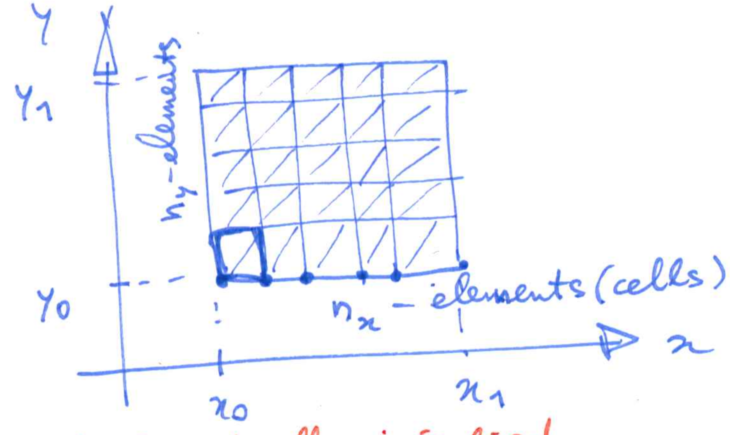
For generating a structured mesh in a rectangular domain $\Omega := (x_0, x_1) \times (y_0, y_1)$, the following command is available in my code:



(1) $$\text{mesh}\,(n_x, n_y, x_0 + (x_1 - x_0)x, y_0 + (y_1 - y_0)y).$$

With a prescribed number of elements n_x & n_y in corresponding directions, it produces the mesh with a constant mesh size, and it can be guessed & checked directly that, in fact, e.g.

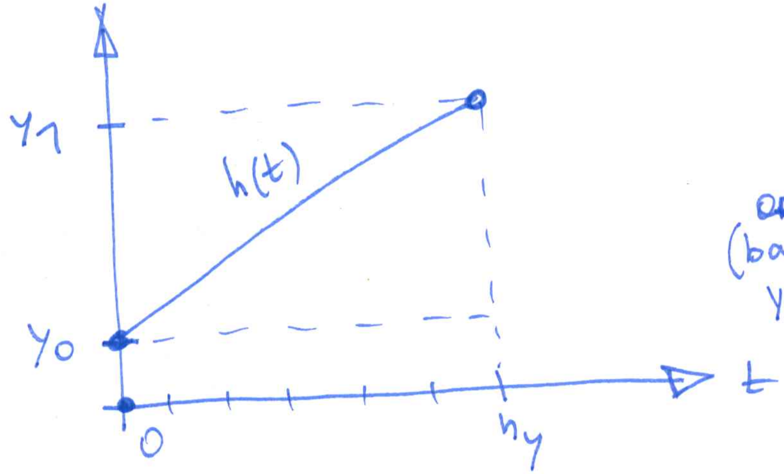
$$\underbrace{y_0 + (y_1 - y_0)\,y}_{\text{how it's arranged}} = \underbrace{y_0 + (y_1 - y_0)\cdot\frac{t}{n_y}}_{\text{what actually is implied}}, \quad \text{with } t \in [0, n_y],$$

$y \in [0,1]$

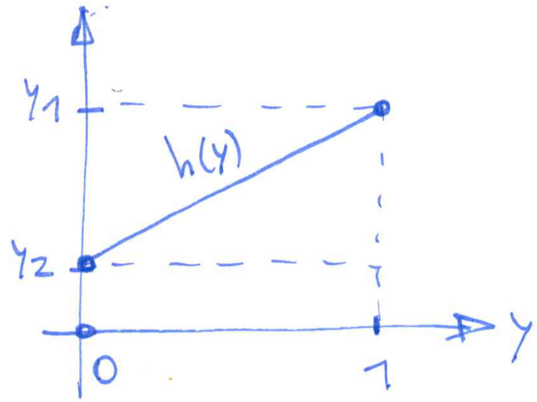
that is $\frac{y_1 - y_0}{n_y}$ actually ~~a~~ defines the mesh ~~cell~~ (unit cell size) in a direction y.

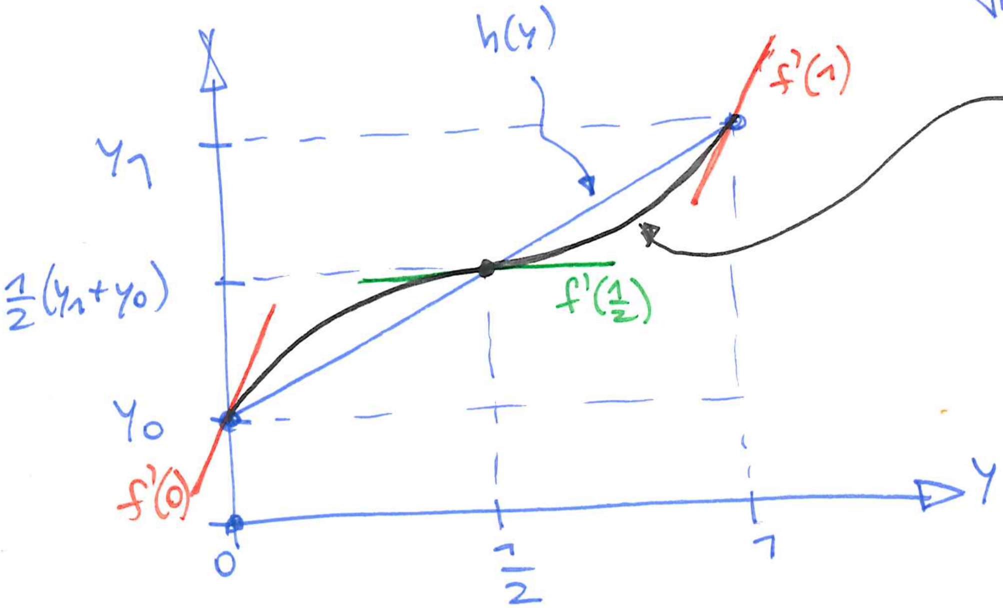
Here is, the plot of a (linear) function $h(t) := y_0 + (y_1 - y_0)\,\frac{t}{n_y}$.

Recall, that namely in this direction (y) we need a "graded" grid, that would account for a support of a PF variable d adequately. $\Rightarrow$ modification of $h(t)$ (or $h(y)$) is required.



OR (back in $y = \frac{t}{n_y}$)





The proposed modification:

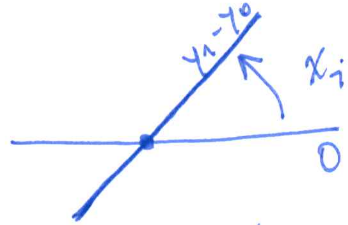
$$f(y) := Ay^5 + By^4 + Cy^3 + Ey^2 + Fy + G, \qquad (2)$$

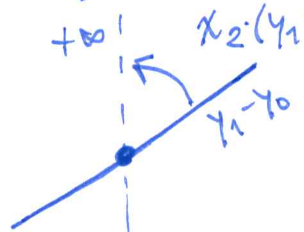
such that

$$(3): \begin{cases} f(0) \overset{!}{=} y_0 \\ f(\tfrac{1}{2}) \overset{!}{=} \tfrac{1}{2}(y_1+y_0) \\ f(1) \overset{!}{=} y_1 \\ \text{and} \quad f'(0) = f'(1) \overset{!}{=} \chi_2(y_1-y_0), \ \chi_2 \in (1,+\infty) \\ f'(\tfrac{1}{2}) \overset{!}{=} \chi_1(y_1-y_0), \ \chi_1 \in (0,1), \end{cases}$$

where two (user-prescribed) parameters χ_1 & χ_2 control the slopes of f (and hence the density of the mesh size) at/near the corresponding regions: $y=\frac{1}{2}$ is where the support of d is "expected", $y \in \{0,1\}$ the lower & upper edges of Ω.

Note, that $\underbrace{\chi_1 = 1 \text{ and } \chi_2 = 1}_{\text{the limiting cases}}$ would turn f into h, since the slope of h is nothing but $y_1 - y_0$:





(2) → (1) yields:

$$\begin{cases} A = 8(2\chi_1 + \chi_2 - 3)(y_1 - y_0) \\ B = -20(2\chi_1 + \chi_2 - 3)(y_1 - y_0) \\ C = 2(16\chi_1 + 9\chi_2 - 25)(y_1 - y_0) \\ E = -(8\chi_1 + 7\chi_2 - 15)(y_1 - y_0) \\ F = \chi_2(y_1 - y_0) \\ G = y_0 \end{cases}$$

In our case:
$y_0 = -b$, $y_1 = b$
I set, for a moment,
$n_x = 40, n_y = 80$ & $\chi_1 = 0.01$, $\chi_2 = 2$

2