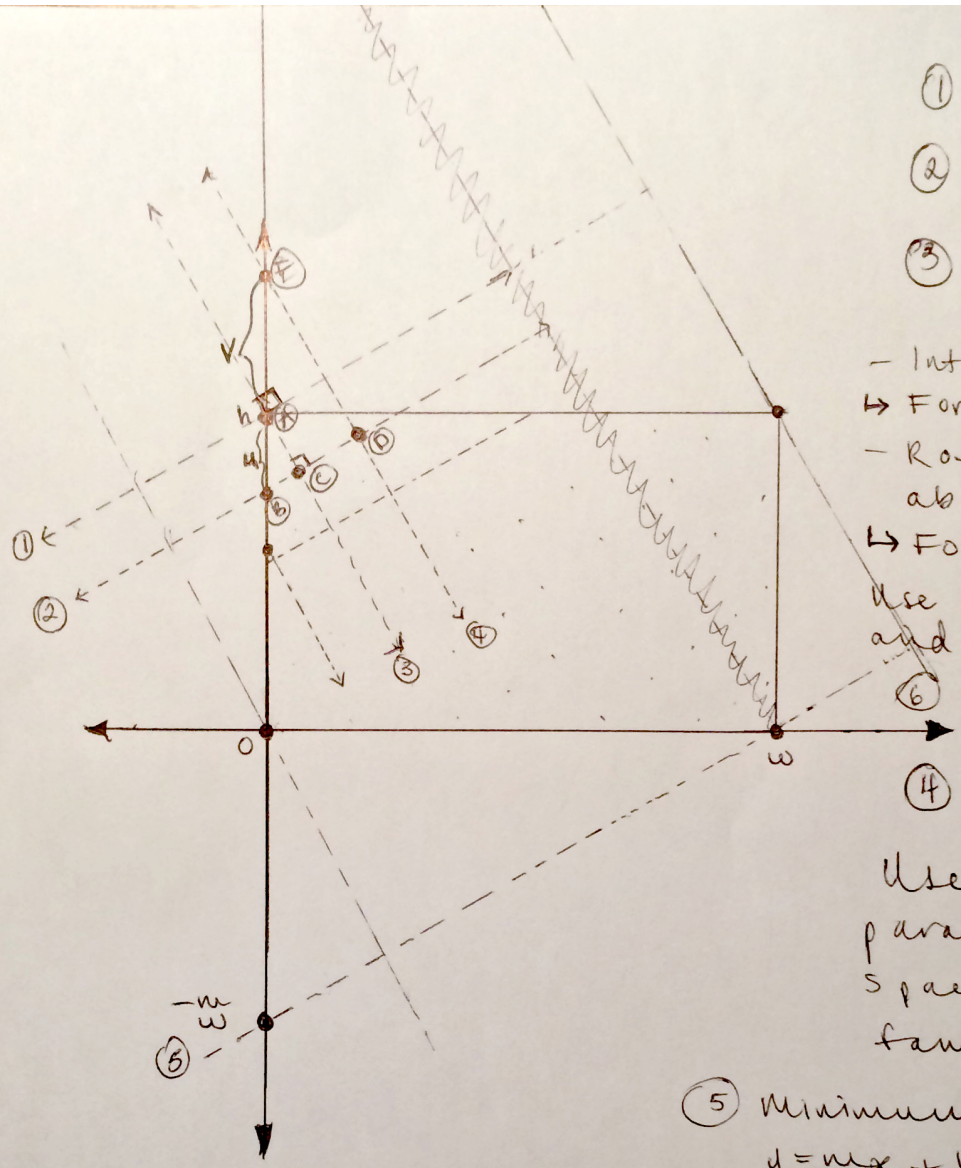

① $y = mx + h$

② $y = mx + (h - u)$

③ $y = \frac{-1}{m}x + h$

- Intersect line ② + ③.
  ↳ Form C.
- Rotate 90° A about point C.
  ↳ Form D.

Use line ③ information and D to produce ④.

④ $y = \frac{-1}{m}x + (h + \underline{\underline{v}})$

Use u and v as parameters for spacing the two families of lines.

⑤ Minimum y-intercept

$y = mx + b$

$0 = mw + b \Rightarrow y = mx - mw$

$b = -mw$

⑥ maximum y-intercept for negative slope.

$h = \frac{-1}{m}w + b$

$b = \frac{w}{m} + h$

$y = \frac{-x}{m} + \frac{w}{m} + h$

Positive: $[h, -mw]$ where $m > 0$

Negative: $\langle h - v \rangle$ while $y > 0$

then $\langle h + v \rangle$ while $y < \frac{w}{m} + h$