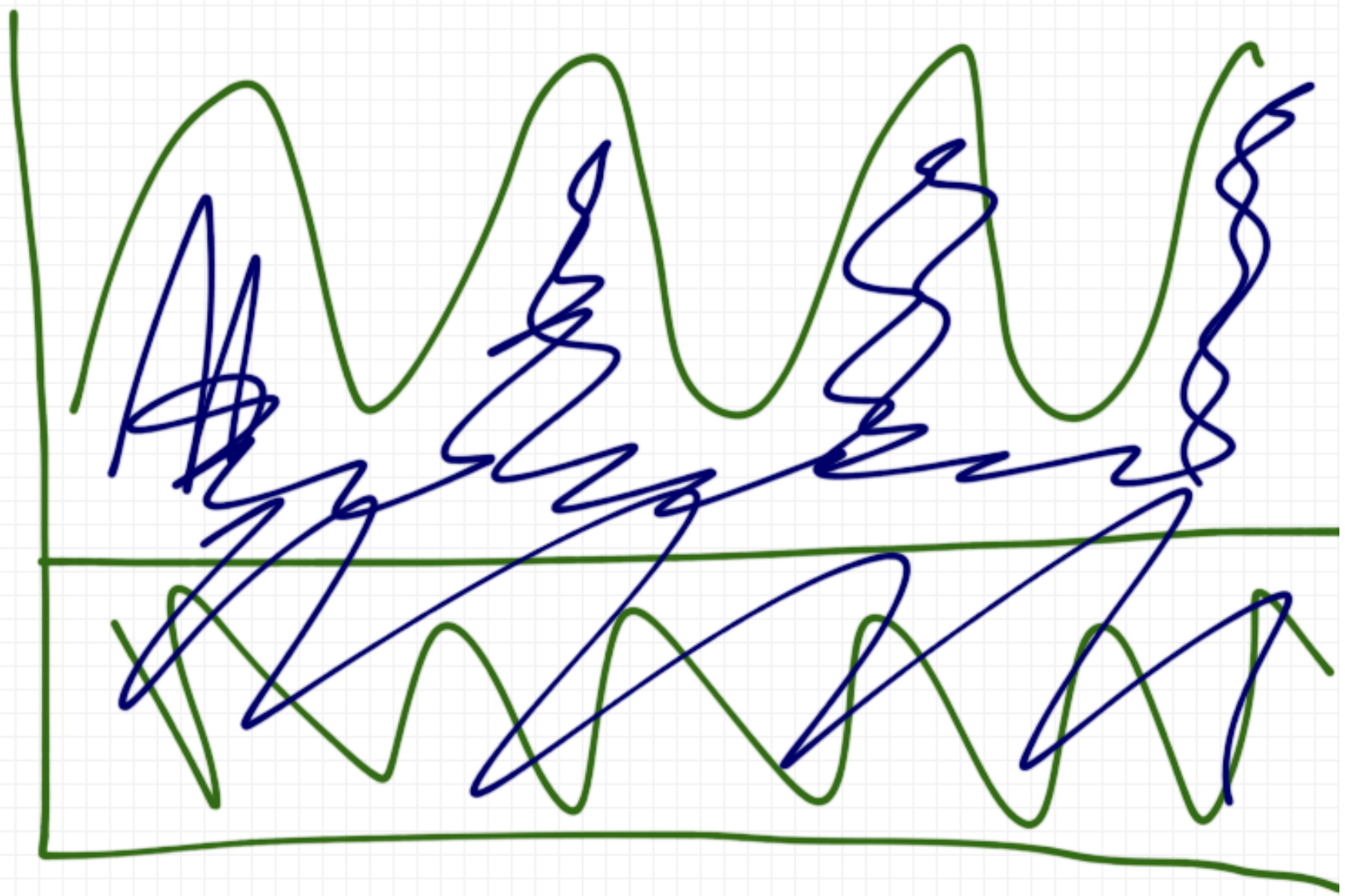


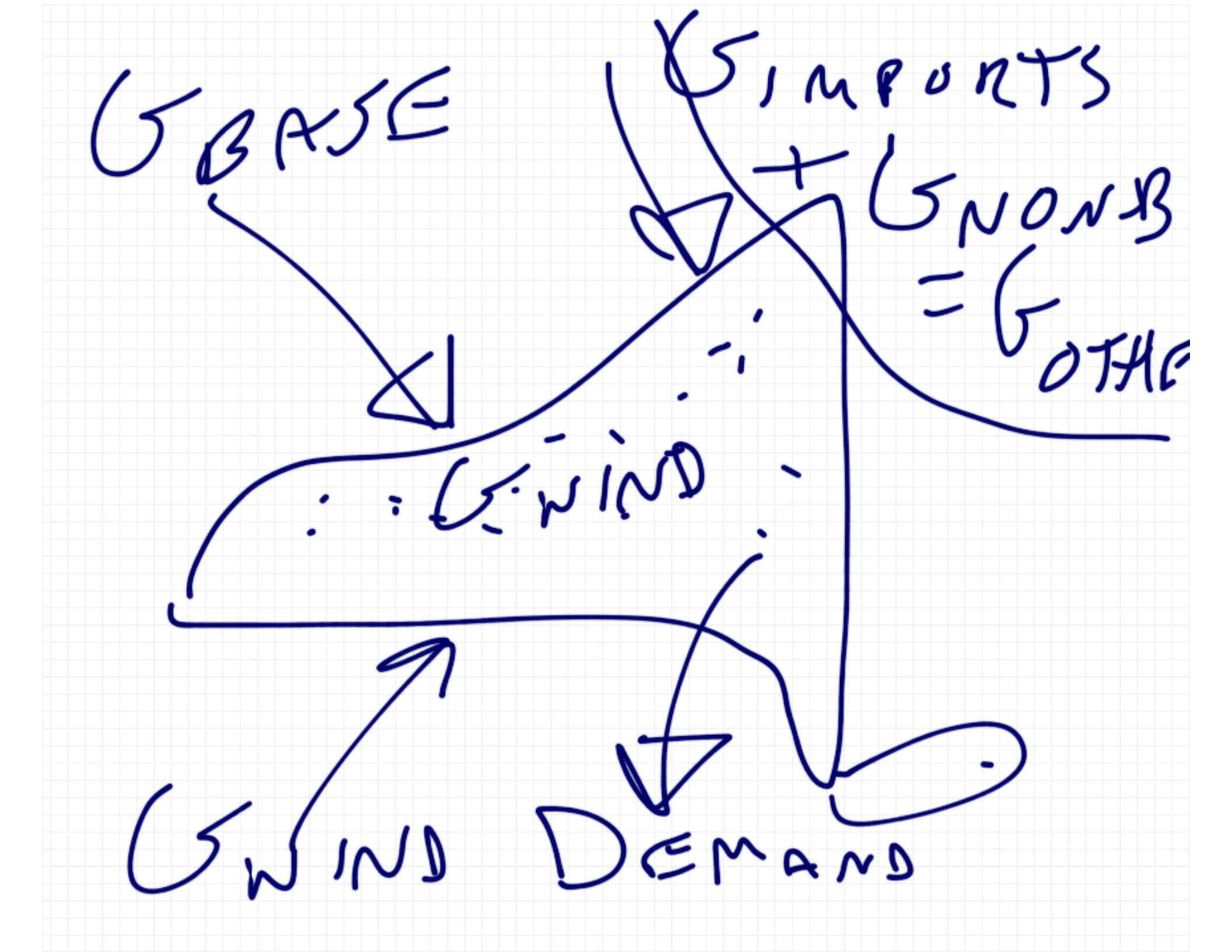
$$x_1 + x_2 + x_3 + 4x_4 \leq 10$$

$$2x_1 + 3x_2 - x_4 \geq 0$$

$$x_1 + x_2 - x_3 - x_4 = 5$$

MINIMIZE $= x_4$ *

$$\begin{array}{c} x_1\ x_2\ x_3\ x_4 \\ \begin{bmatrix} 1 & 1 & 1 & 4 \\ 2 & 3 & 0 & -1 \\ 1 & 1 & -1 & -1 \end{bmatrix} \end{array} \quad \begin{bmatrix} \text{"}\leq\text{"} \\ \text{"}\geq\text{"} \\ \text{"}=\text{"} \end{bmatrix} \quad \begin{bmatrix} 10 \\ 0 \\ 5 \end{bmatrix}$$

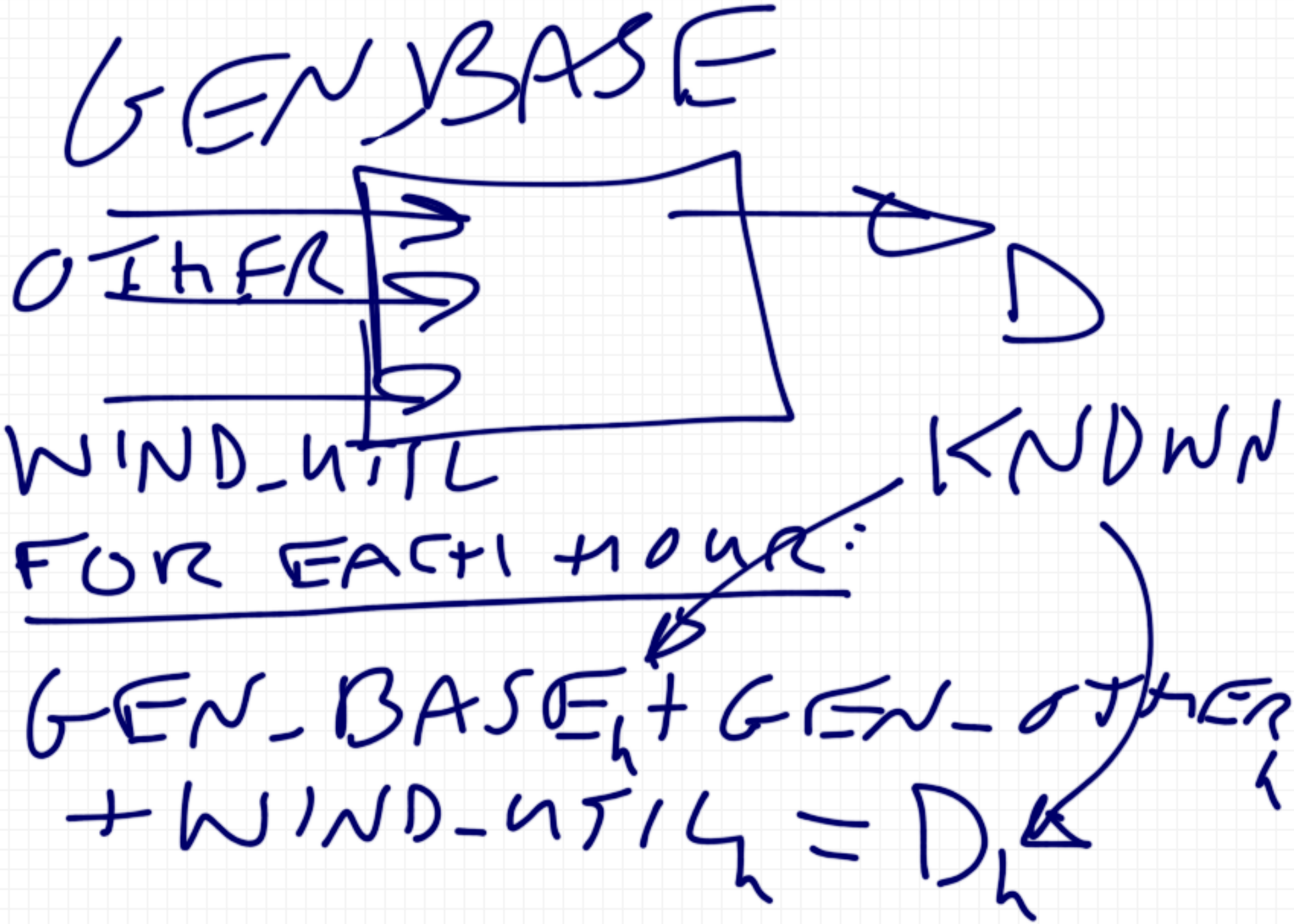

G BASE
G IMPORTS
+
G NONB
= G OTHE
G WIND
G WIND
DEMAND

VARIABLES

$n.t_i$

GEN_OTHER_h

$WIND\_UTIL_h$


GEN_BASE
OTHER
WIND_UTIL
D
KNOWN
FOR EACH HOUR:
GEN_BASE_h + GEN_OTHER_h
+ WIND_UTIL_h = D_h

$$GEN\_OTHER_h + WIND\_UTIL_h = D_h - G\_BASE_h$$

$$h = 1 : 8760 \Rightarrow 8760$$

CONSTRAINT

OBJECTIVE:

$$\text{MIN} \sum_{h} \text{GEN\_OTHER}_{h}$$

$$WIND\_UTIL_h \leq \sum_{i=1}^{66} n.t_i \times WIND\_PER_{i,h}$$

AT EACH, AT EACH HOUR, MW/TURBINE GIVEN DATA

ENERGY BALANCE

$$\sum_{i}^{66} POT\_WIND\_PER_{i,h} \times n.t_i + GEN\_OTHER_h \geq D_h - GEN\_BASE_h$$

8760 CONSTRAINTS

$$\sum_{i=1}^{66} n.t_i = N.t$$

BOUNDS

$$0 \leq GEN\_OTHER_h \leq C$$

$$0 \leq n.t_i \leq n.t.MAX_i$$

FORCE $n.t_i$ TO BE INTEGER