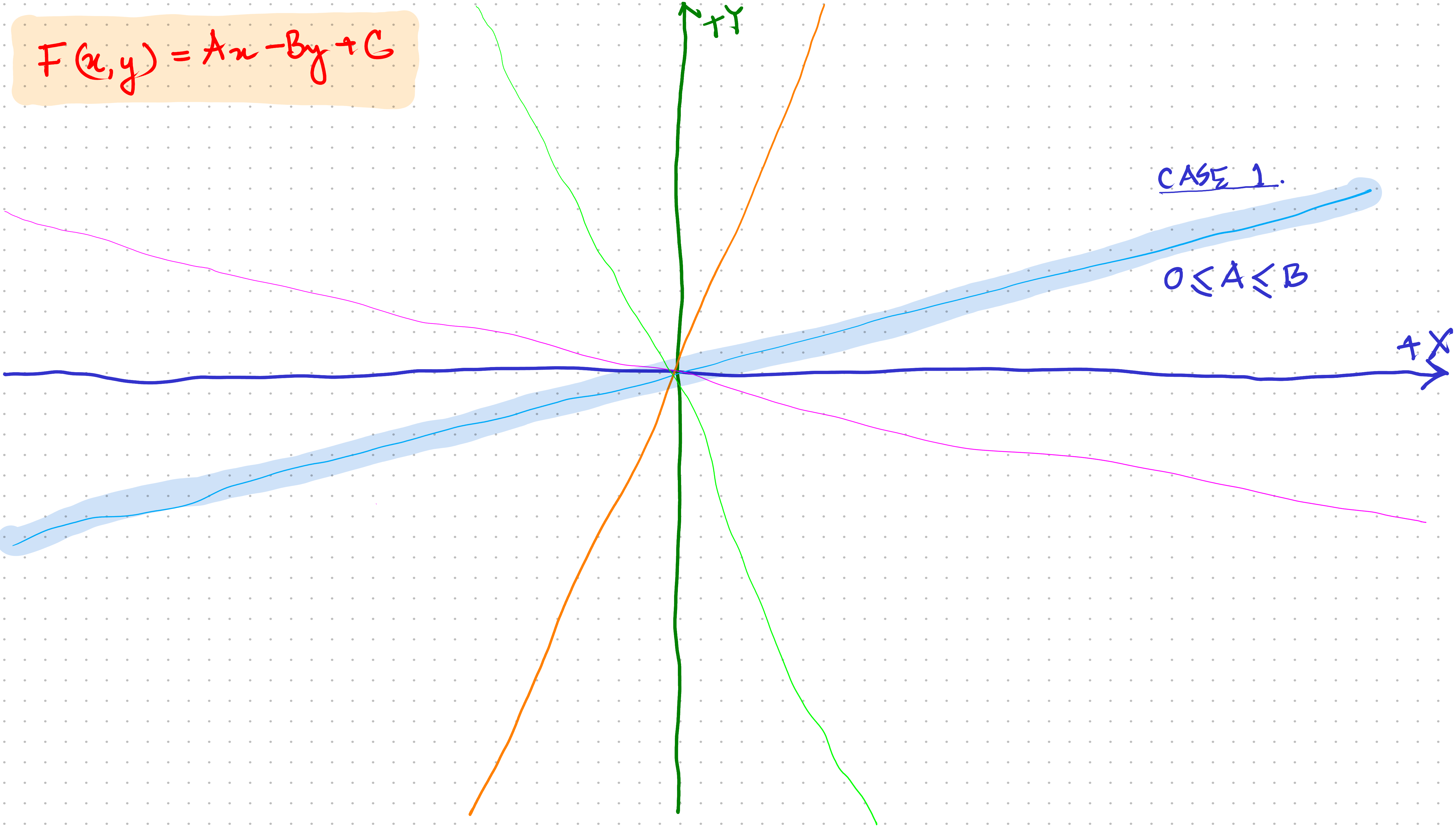
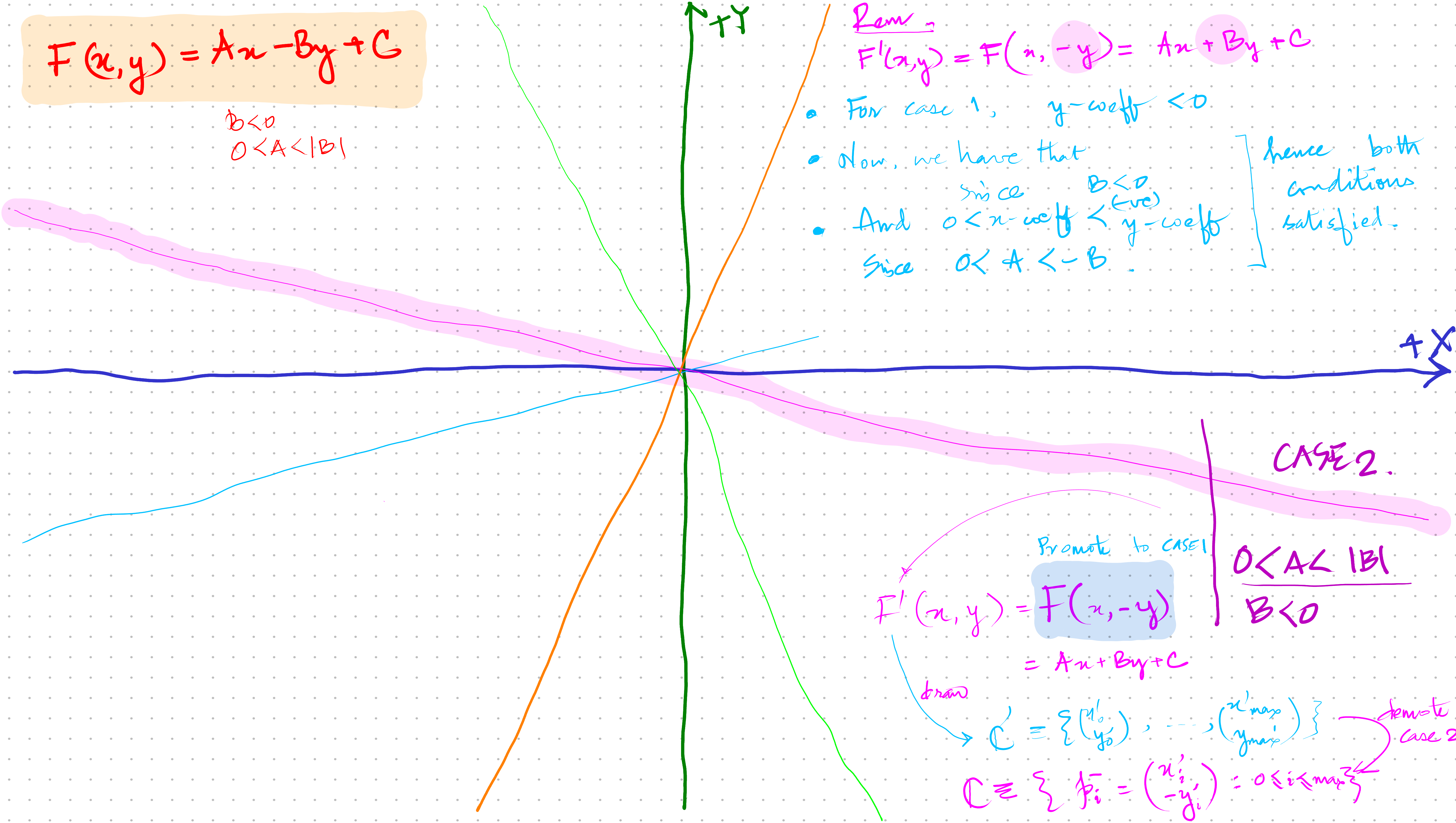
$$F(x,y) = Ax - By + C$$





$$F(x,y) = Ax - By + C$$

$B<0$
$0<A<|B|$

Rem:

$F'(x,y) = F(x,-y) = Ax + By + C$

- For case 1, y-coeff <0
- Now, we have that
- And $0 < x\text{-coeff} \overset{\text{since } B<0}{<} \overset{(+ve)}{y\text{-coeff}}$

  Since $0 < A < -B$.

hence both conditions satisfied.

CASE 2.

$0<A<|B|$
$B<0$

Promote to CASE 1

$F'(x,y) = \boxed{F(x,-y)}$
$= Ax+By+C$

draw

$C' = \left\{ \begin{pmatrix} x'_0 \\ y'_0 \end{pmatrix}, \dots, \begin{pmatrix} x'_{max} \\ y'_{max} \end{pmatrix} \right\}$

demote to case 2.

$C = \left\{ p_i = \begin{pmatrix} x'_i \\ -y'_i \end{pmatrix} : 0 \le i \le max \right\}$

$$F(x,y) = Ax - By + C$$

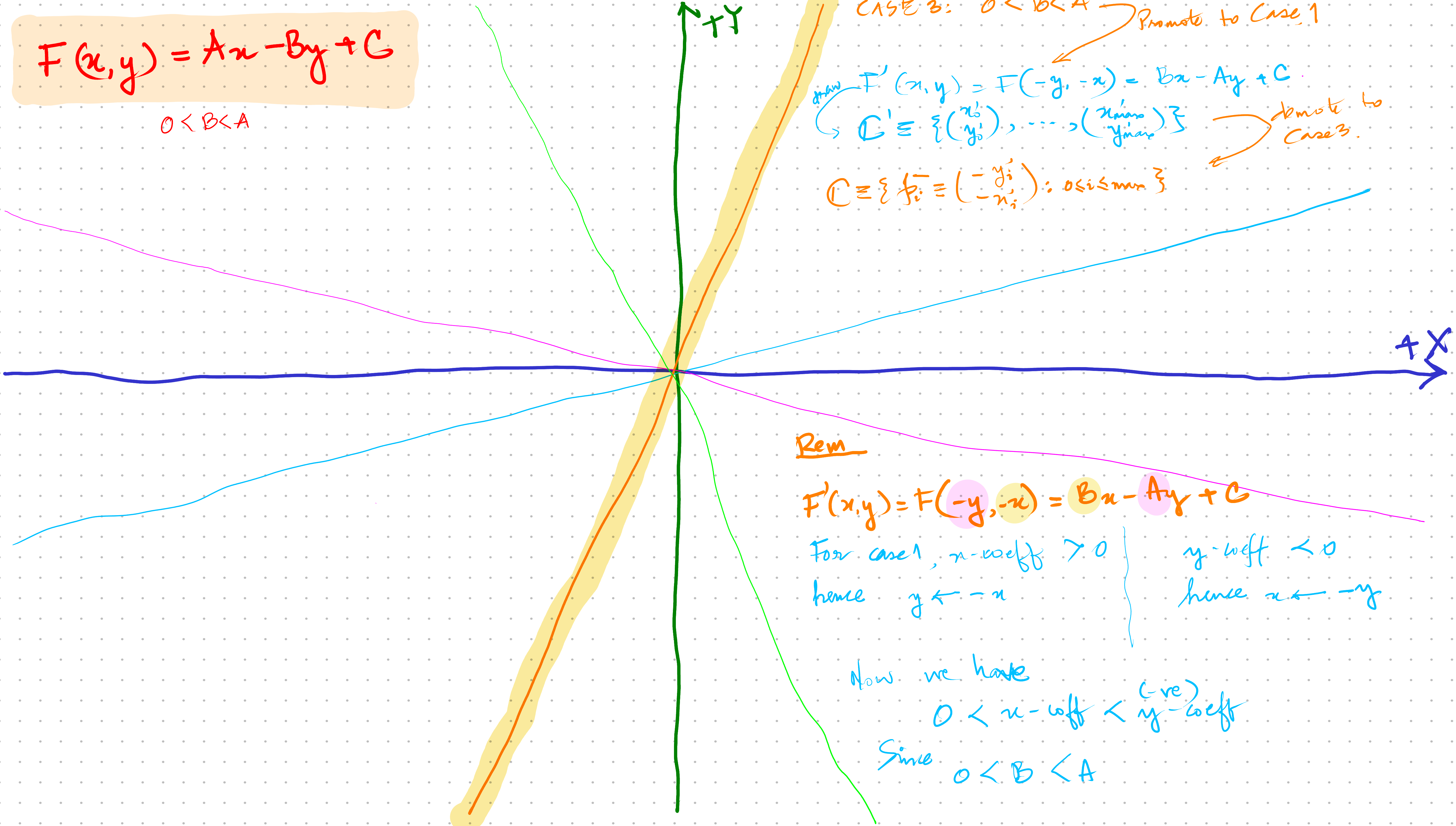
$0 < B < A$

CASE 3: $0 < B < A$ Promote to Case 1

draw $F'(x,y) = F(-y,-x) = Bx - Ay + C$

$C' \equiv \left\{ \begin{pmatrix} x'_0 \\ y'_0 \end{pmatrix}, \dots, \begin{pmatrix} x'_{max} \\ y'_{max} \end{pmatrix} \right\}$ demote to Case 3.

$C \equiv \left\{ p_i \equiv \begin{pmatrix} -y'_i \\ -x'_i \end{pmatrix} : 0 \le i \le max \right\}$



Rem

$F'(x,y) = F(-y,-x) = Bx - Ay + C$

For case 1, x-coeff > 0 | y-coeff < 0

hence $y \leftarrow -x$ | hence $x \leftarrow -y$

Now we have

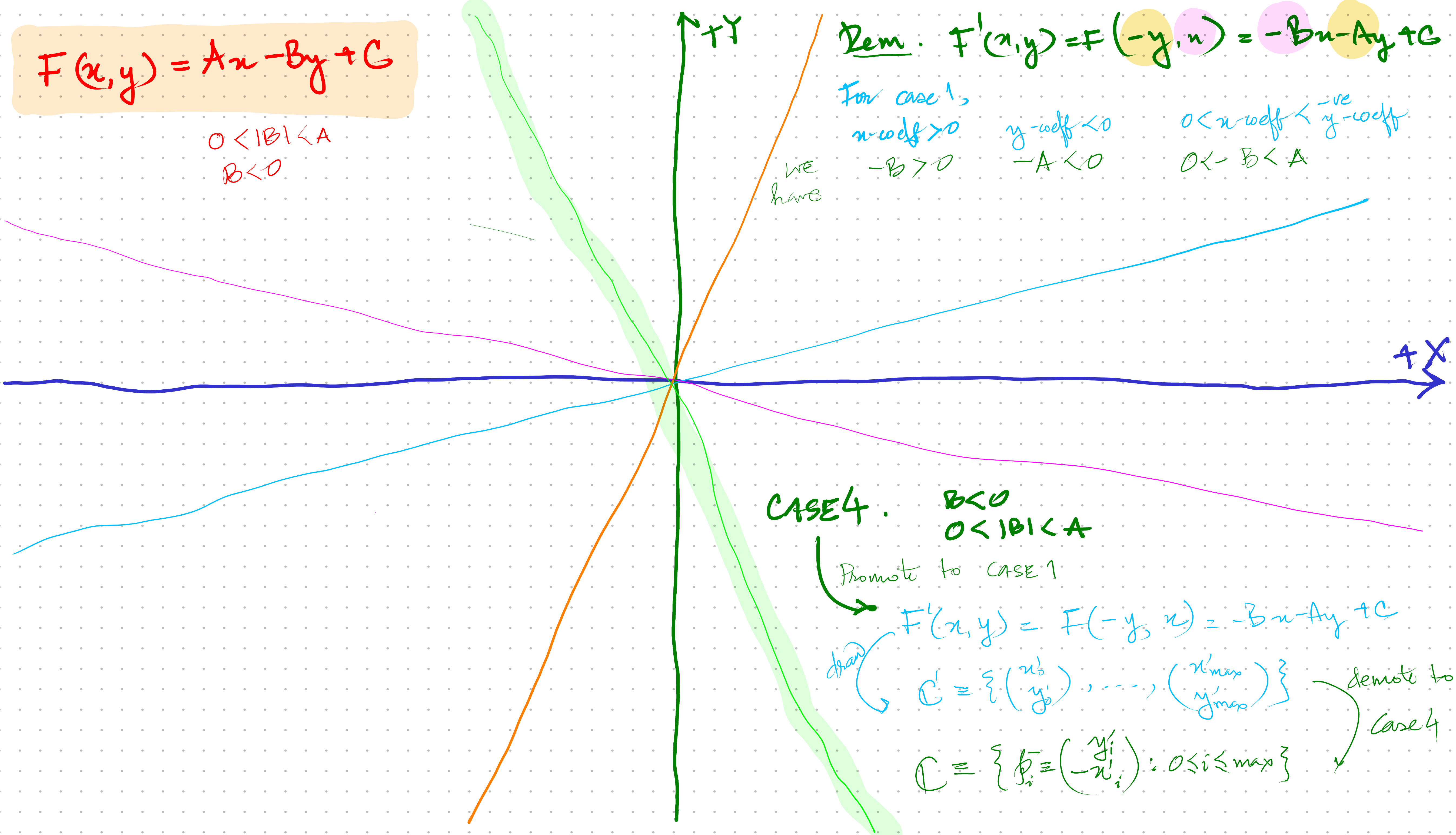
$0 < x\text{-coeff} < \overset{(-ve)}{y\text{-coeff}}$

Since $0 < B < A$

$$F(x, y) = Ax - By + C$$

$0 < |B| < A$

$B < 0$



Rem. $F'(x,y) = F(-y, x) = -Bx - Ay + C$

For case 1,

	$x\text{-coeff} > 0$	$y\text{-coeff} < 0$	$0 < x\text{-coeff} < -\text{ve } y\text{-coeff}$
we have	$-B > 0$	$-A < 0$	$0 < -B < A$

CASE 4. $B < 0$

$0 < |B| < A$

Promote to CASE 1

$$F'(x,y) = F(-y, x) = -Bx - Ay + C$$

draw

$$C' = \left\{ \begin{pmatrix} x'_0 \\ y'_0 \end{pmatrix}, \ldots, \begin{pmatrix} x'_{max} \\ y'_{max} \end{pmatrix} \right\}$$

demote to case 4

$$C = \left\{ p_i = \begin{pmatrix} y'_i \\ -x'_i \end{pmatrix} : 0 \le i \le max \right\}$$