

GÉOMÉTRIE

ALGÈBRE

GÉO. VECT

3.1.18

3.1.19

3.1.21

3.1.23

3.1.28

3.1.29

3.1.25

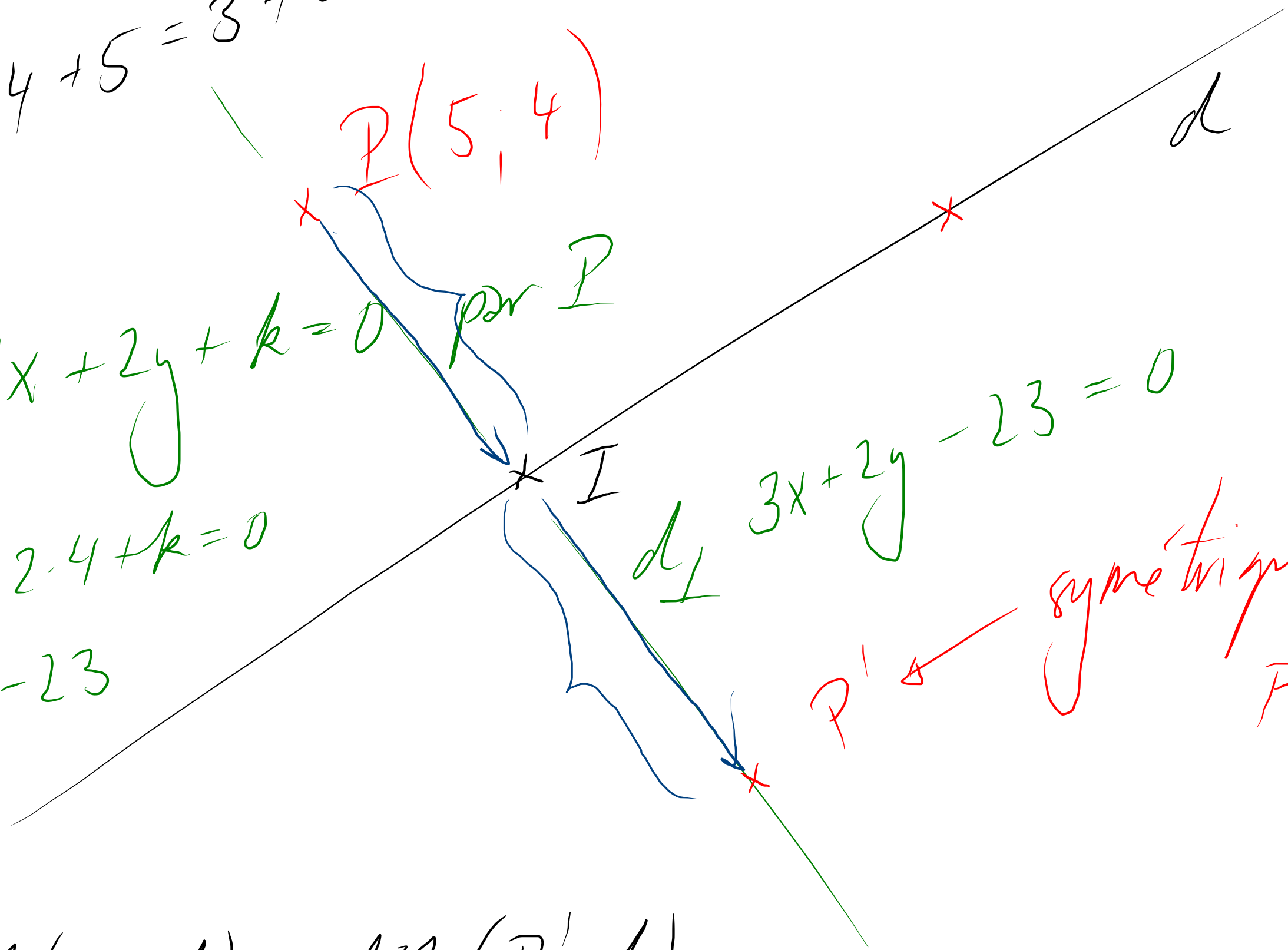
?
 $P \notin d$
 $2 \cdot 5 - 3 \cdot 4 + 5 = 3 \neq 0 \Rightarrow P \notin d$

$d: 2x - 3y + 5 = 0$

$d_{\perp}: 3x + 2y + k = 0$ par P

$3 \cdot 5 + 2 \cdot 4 + k = 0$
 $k = -23$

$d_{\perp}: 3x + 2y - 23 = 0$



symétrique de
 P par rapport
à d

$dist(P, d) = dist(P', d)$

$\|\vec{PI}\| = \|\vec{IP'}\|$

$$\underline{I} \left\{ \begin{array}{l} 2x - 3y + 5 = 0 \\ 3x + 2y - 23 = 0 \end{array} \right. \begin{array}{l} -3 \\ 2 \end{array}$$

$$\underline{I} \left(\begin{array}{cc} 59 & 61 \\ 13 & 13 \end{array} \right)$$

$$\left\{ \begin{array}{l} -6x + 9y - 15 = 0 \\ 6x + 4y - 46 = 0 \end{array} \right.$$

$$\underline{PI} = \left(\begin{array}{cc} \frac{59}{13} & -\frac{65}{13} \\ \frac{61}{13} & -\frac{52}{13} \end{array} \right) = \left(\begin{array}{c} -\frac{6}{13} \\ \frac{9}{13} \end{array} \right)$$

$$13y = 61$$

$$y = \frac{61}{13}$$


$$x = \frac{3y - 5}{2} = \frac{\frac{183}{13} - \frac{65}{13}}{2}$$

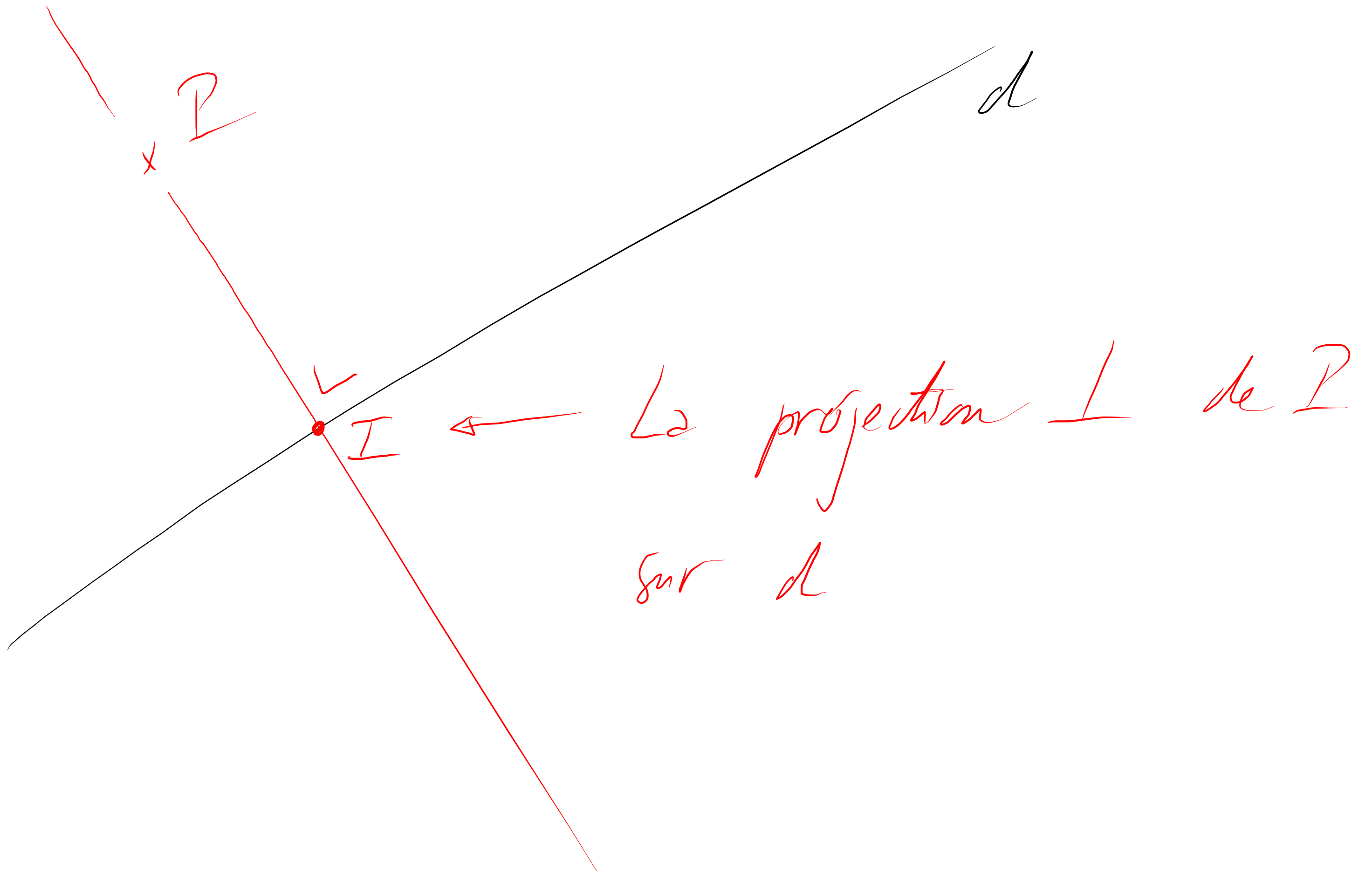
$$= \frac{118}{26} = \frac{59}{13}$$

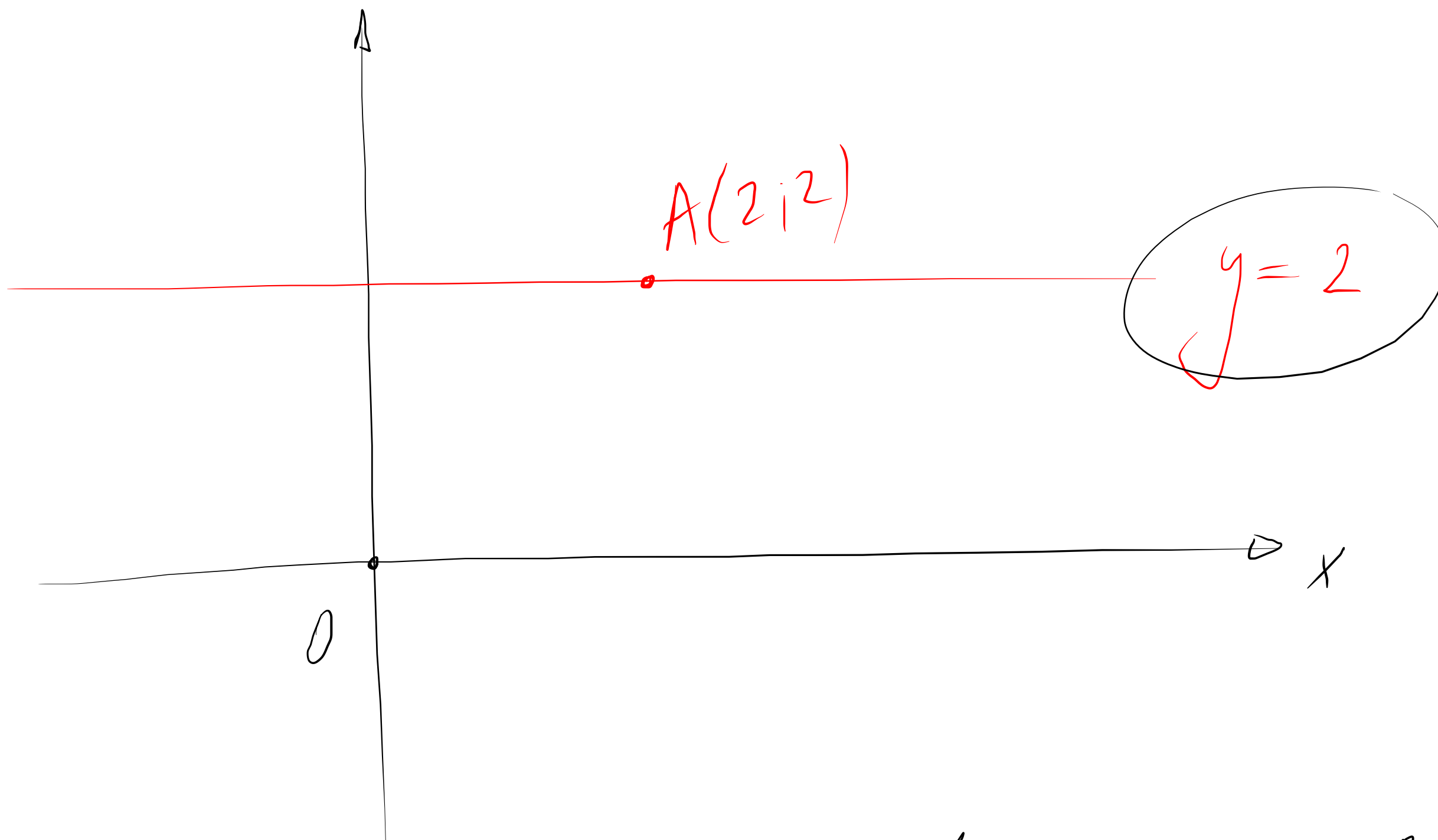
$$\underline{P}' = \left(\frac{59 - 6}{13}, \frac{67 + 9}{13} \right) = \left(\frac{53}{13}, \frac{76}{13} \right)$$

$\underline{I} + \overrightarrow{PI}$

Symétrique







$$0x + 1 \cdot y + k = 0$$

$$0 \cdot 2 + 1 \cdot 2 + k = 0$$

$$k = -2$$

$$0x + y - 2 = 0$$

$$\boxed{y = 2}$$