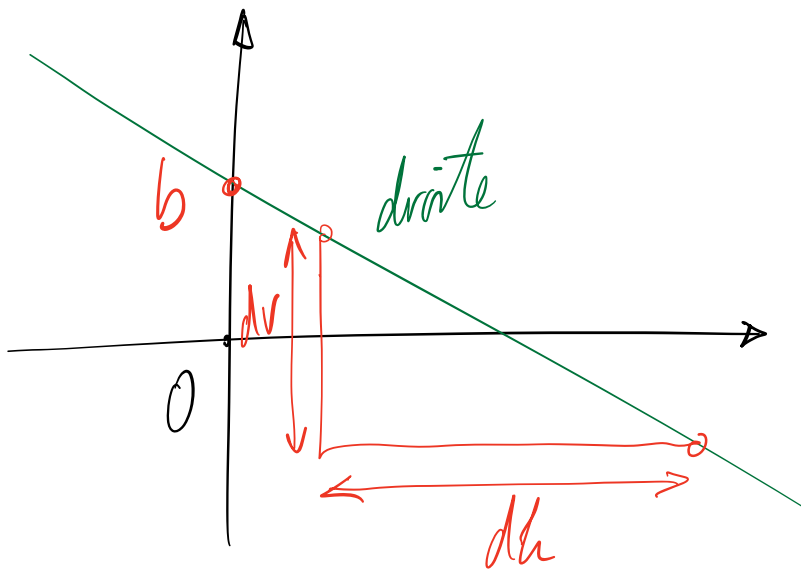


Fonction affine



$$f(x) = ax + b$$

O.O.

$$\text{pente} = \frac{dv}{dh}$$

Droite

$$ax + by + c = 0$$

Example:

$$3x - 2y + 1 = 0$$

d

Dessiner la droite d.

① $\begin{cases} x=0 \\ y=0,5 \end{cases}$
(0; 0,5)

$$3 \cdot 0 - 2y + 1 = 0$$

$$-2y + 1 = 0 \quad | \quad 2y = 1 \quad | \quad y = 0,5$$

$$\textcircled{2} \quad y=0 \Rightarrow 3x - 2 \cdot 0 + 1 = 0$$

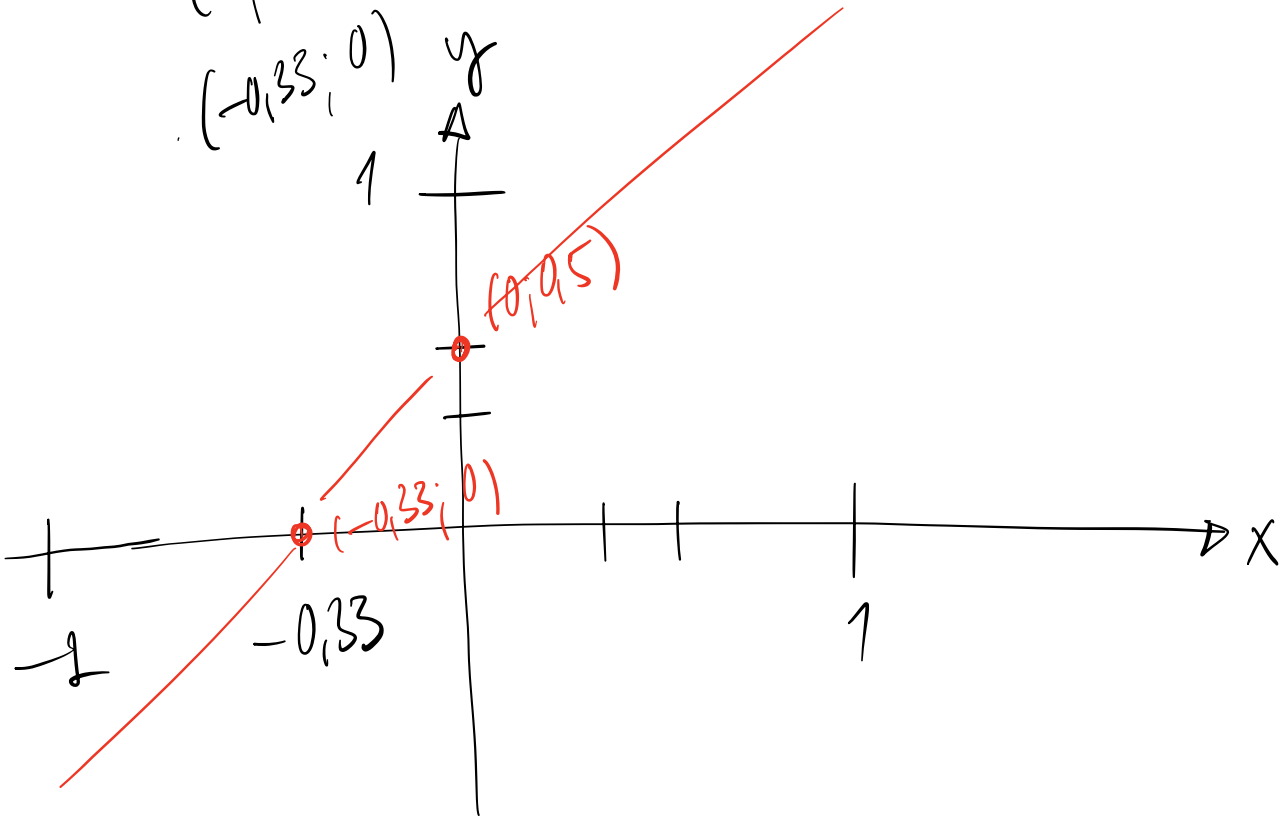
$$(-0,33; 0) \quad x = -0,33$$

$$3x + 1 = 0$$

$$3x = -1 \quad / \quad x = -\frac{1}{3} \approx -0,33$$

$$(0; 0,5)$$

$$(-0,33; 0)$$



$$3x - 2y + 1 = 0$$

$$3x + 1 = 2y \quad / \quad 2y = 3x + 1 \quad / \quad y = 1,5x + 0,5$$

$$2x^2 + 6x + c = 0$$

$$\Delta = 6^2 - 4 \cdot 2 \cdot c$$

$$x_1 = \frac{-6 + \sqrt{\Delta}}{2 \cdot 2}$$

$$x_2 = \frac{-6 - \sqrt{\Delta}}{2 \cdot 2}$$

$$3x - 2y = 16$$

$$3 \cdot 0 - 2 \cdot (-8) = 0 + 16 = 16 \checkmark$$

① *deduktion*

$$\boxed{\begin{array}{l} x = 0 \\ y = -8 \end{array}}$$

$(0; -8)$

$$3 \cdot 0 - 2 \cdot y = 16$$

$$-2y = 16$$

$$y = -8$$

②

$$y = 0$$

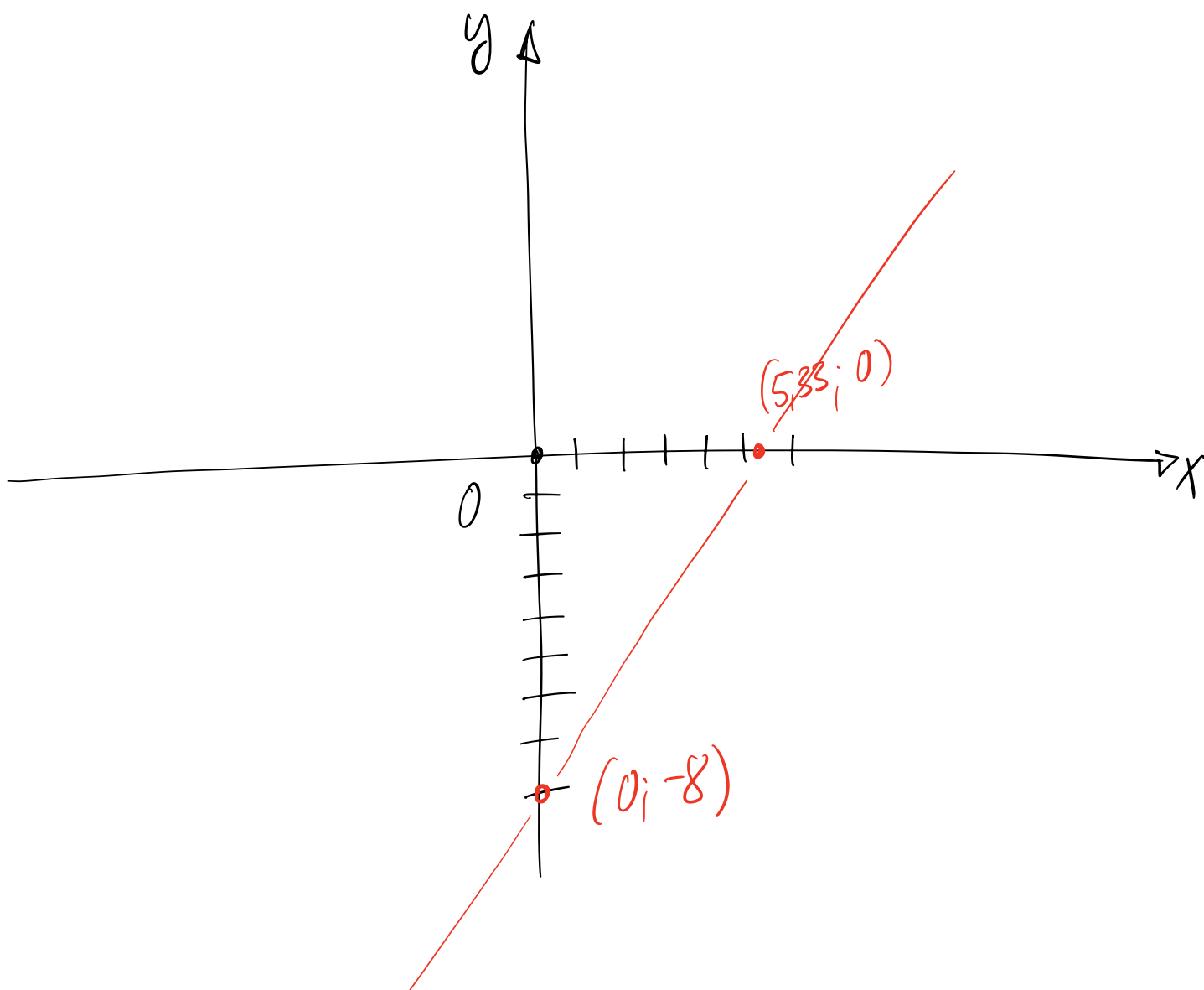
$$x \approx 5,33$$

$(5,33; 0)$

$$3 \cdot x - 2 \cdot \overset{0}{0} = 16$$

$$3x = 16$$

$$x \approx 5,33$$



72

$$a) \quad x^2 + 0x - 299 = 0$$

$$\Delta = 0^2 - 4 \cdot 1 \cdot (-299) = 1196$$

$$x = \frac{-0 \pm \sqrt{1196}}{2}$$

$$b) \quad x^2 + x - 1 = 0$$

$$\Delta = 1^2 - 4 \cdot 1 \cdot (-1) = 1 + 4 = 5$$

$$x = \frac{-1 \pm \sqrt{5}}{2}$$

$$c) \quad x^2 - 3x - 13 = 0$$

$$\Delta = (-3)^2 - 4 \cdot 1 \cdot (-13) = 9 + 52 = 61$$

$$x = \frac{3 \pm \sqrt{61}}{2}$$

$$d) \quad 0,5x^2 - 3x + 2,5 = 0$$

$$\Delta = (-3)^2 - 4 \cdot 0,5 \cdot 2,5 = 9 - 5 = 4$$

$$\sqrt{\Delta} = 2$$

$$x = \frac{3 \pm 2}{1} \begin{matrix} \nearrow 5 \\ \searrow 1 \end{matrix}$$