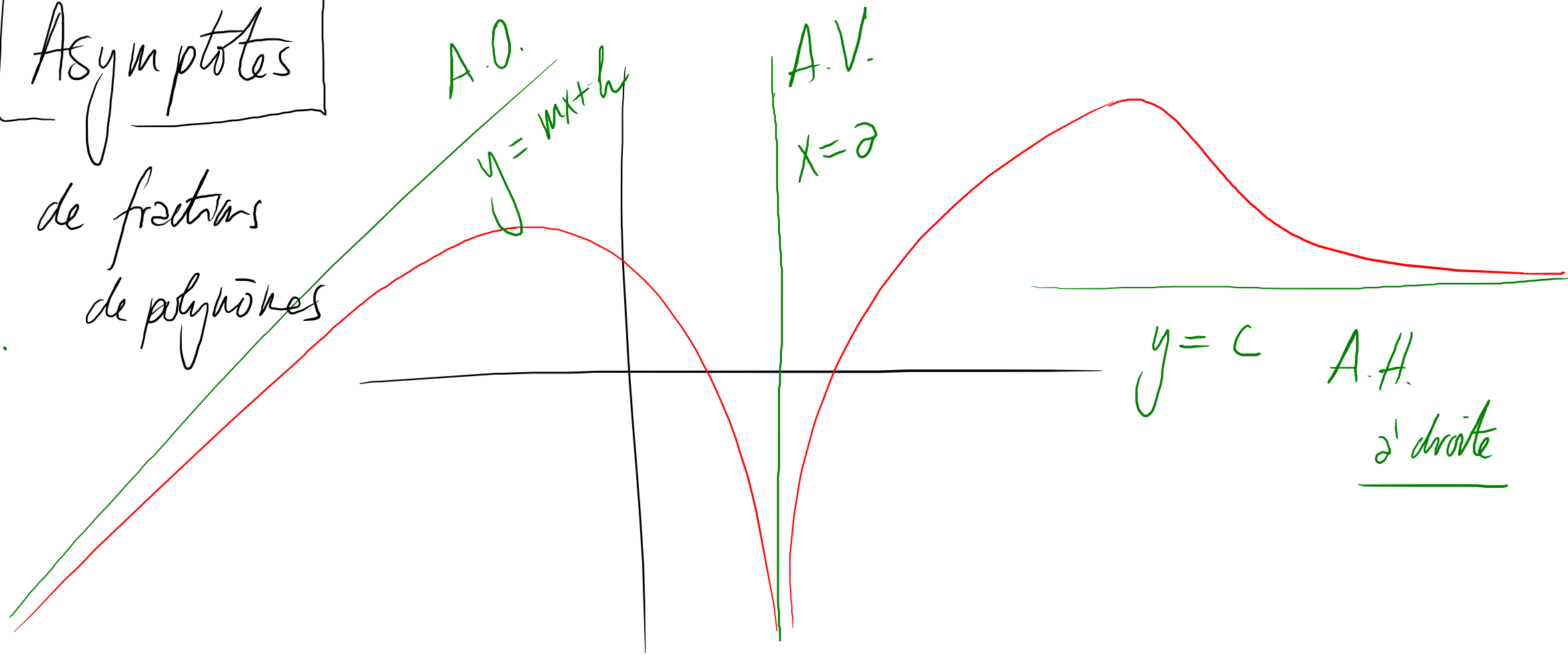


Asymptotes

de fractions
de polynomes



$$\begin{array}{r|l} x^3+1 & x^2 \\ \hline x^3 & \boxed{x} \\ \hline & 1 \end{array}$$

$$y = x$$

$$\boxed{x^3 + 1 = x \cdot x^2 + 1}$$

Egalte' fond.

$$\frac{x^{\textcircled{3}}+1}{x^{\textcircled{2}}} = x + \frac{1}{x^2} \xrightarrow{x \rightarrow \infty} x$$

$$x^3 - x^2 + 2x + 1$$

A.O. ✓

$$x^2 + 2x - 3$$

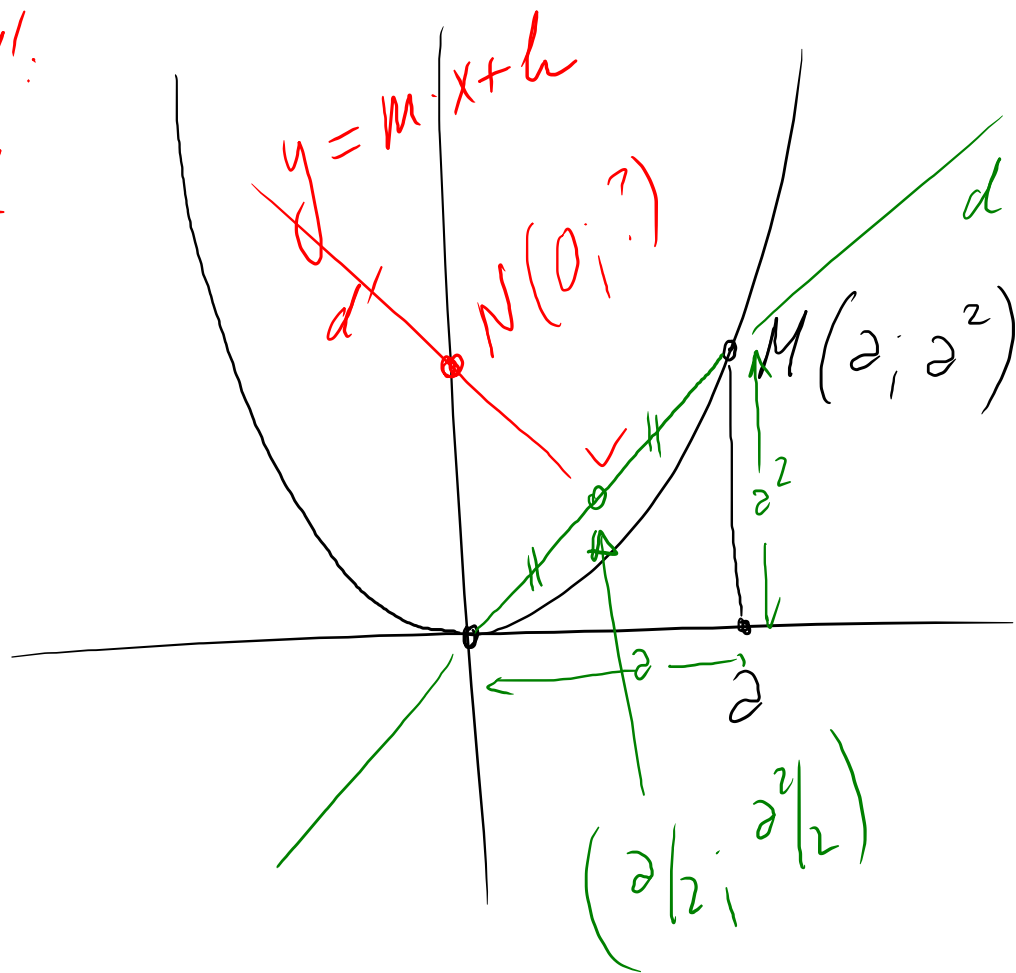
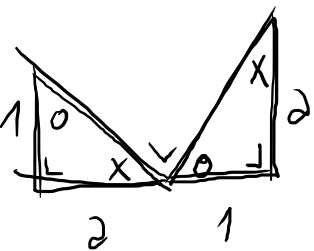
$$\begin{array}{r} \rightarrow x^3 - x^2 + 2x + 1 \\ \rightarrow x^3 + 2x^2 - 3x \\ \hline -3x^2 + 5x + 1 \\ -3x^2 - 6x + 9 \\ \hline -11x - 8 \end{array}$$

Diagram illustrating the division process:

- The dividend $x^3 - x^2 + 2x + 1$ is circled in red.
- The divisor $x^2 + 2x - 3$ is circled in blue.
- The quotient $x + 3$ is circled in blue.
- The remainder $-11x - 8$ is circled in blue.

pende de d' :

$$m = -\frac{1}{2}$$



pende de d : $\frac{a^2}{a} = a$

$$\frac{a^2}{2} = m \cdot \frac{a}{2} + h$$

$$h = \frac{a^2}{2} - m \cdot \frac{a}{2} \\ = \frac{a^2}{2} + \frac{1}{2} \cdot \frac{a}{2} = \frac{a^2}{2} + \frac{1}{2}$$

$$d': y = -\frac{1}{2}x + \frac{a^2}{2} + \frac{1}{2}$$

$$N(0; \cdot) \Rightarrow y = \frac{a^2}{2} + \frac{1}{2}$$

$$N\left(0; \frac{a^2}{2} + \frac{1}{2}\right) \xrightarrow{a \rightarrow 0} N\left(0; \frac{1}{2}\right)$$

$$2x^2 + 3x + 1 = 0$$

$$2x^2 + 3x + 1 \xrightarrow{2 \rightarrow 0} 3x + 1$$

$$2x^2 + 3x + 1 = 0$$

$$\Leftrightarrow x = \frac{-3 \pm \sqrt{9 - 4 \cdot 2}}{2 \cdot 2}$$

$$3x + 1 = 0 \Leftrightarrow x = -\frac{1}{3}$$

$$\frac{-3 + \sqrt{9 - 4 \cdot 2}}{2 \cdot 2} \xrightarrow{2 \rightarrow 0} -\frac{1}{3}$$

$$\frac{-3 - \sqrt{9 - 4 \cdot 2}}{2 \cdot 2} \xrightarrow{2 \rightarrow 0} \infty$$