

$$x^2 + 4y^2 - z = 0$$

$$y = mx + z$$

$$x = k(y - z)$$

$$(4m^2 + 1)u^2 + 16mu + 14 = 0$$

$$y = mx + z$$

$$x = u$$

$$y = mu + z$$

Punto medio da: $\frac{-16m}{4m^2 + 1}$

$$x = -\frac{16m}{4m^2 + 1}$$

$$y = mx + z$$

$$x = -\frac{16m}{4m^2 + 1}$$

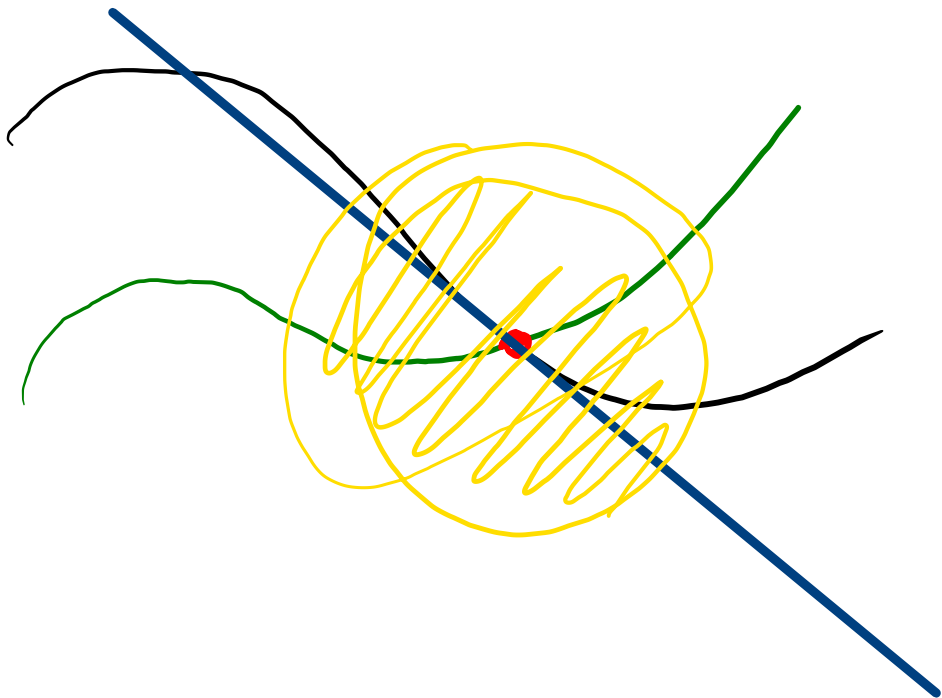
$$m = \frac{y - z}{x}$$

$$\frac{x(4y^2 + x^2 - 16y)}{4y^2 - 16y + x^2 + 16} = 0$$

$$\frac{(y - z)(4y^2 + x^2 - 8y)}{4y^2 - 16y + x^2 + 16}$$

$$\begin{pmatrix} 16 & 0 & -8 \\ 0 & 1 & 0 \\ -8 & 0 & 4 \end{pmatrix}$$

autovalori: 0, 1, 20 segnatura (2, 0)



$$y = f(x) = a_1 x + a_2 x^2 + \dots + a_n x^n + a_{n+1} x^{n+1} + O(n+2)$$

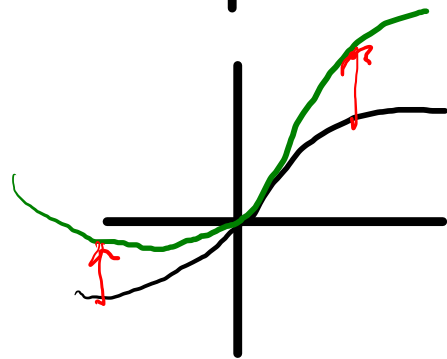
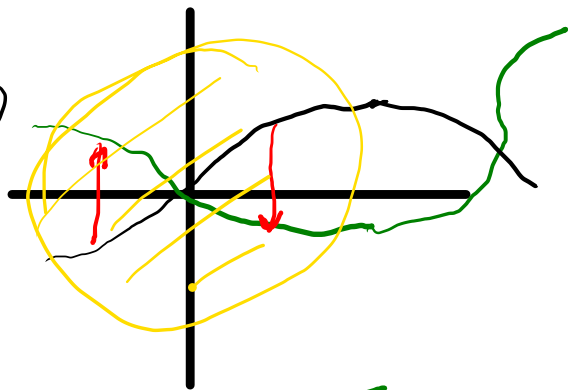
$$y = \varphi(x) = b_1 x + b_2 x^2 + \dots + b_n x^n + b_{n+1} x^{n+1} + O(n+2)$$

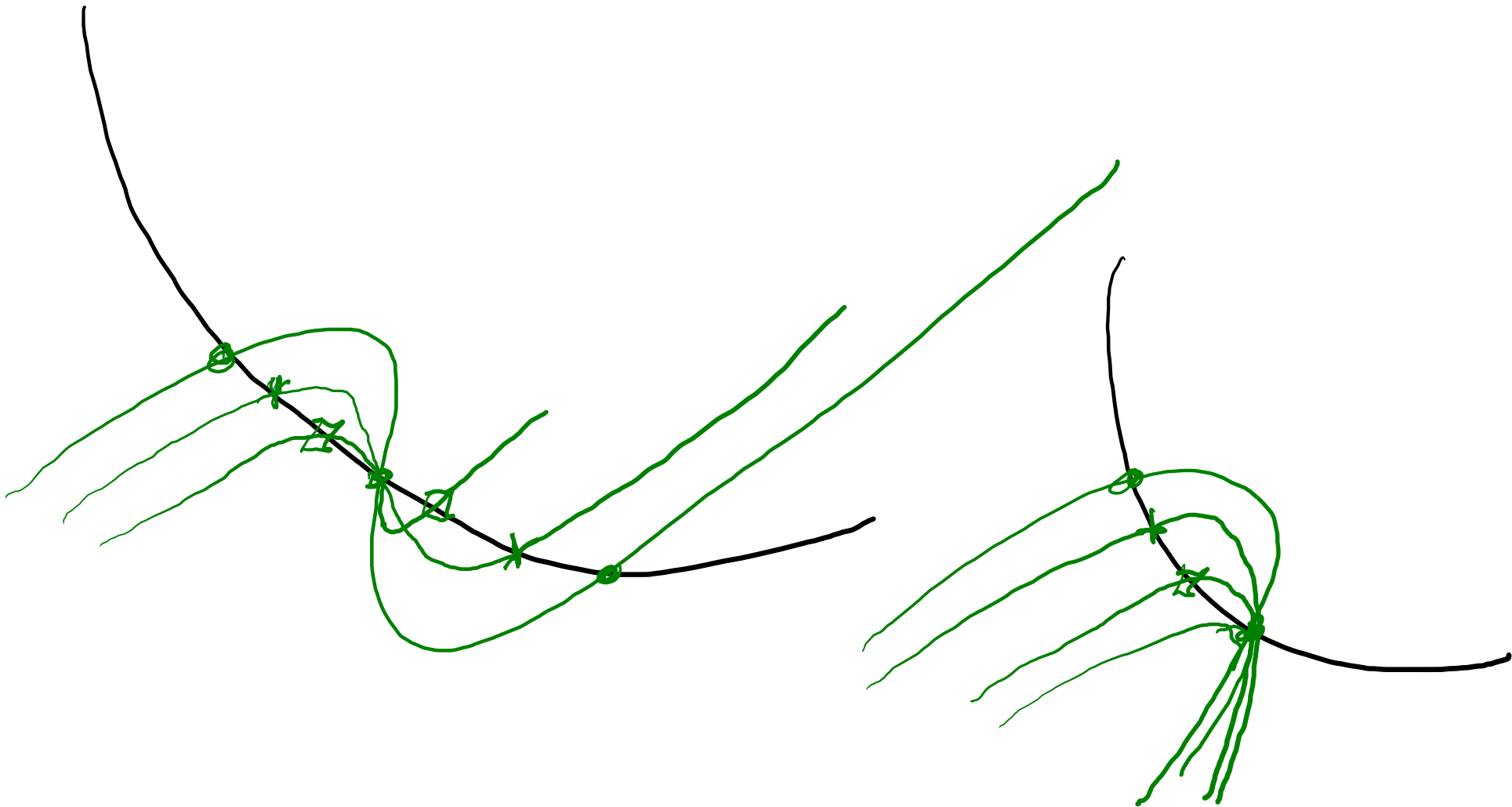
$$\varphi(x) - f(x) =$$

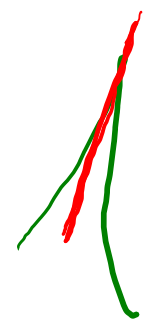
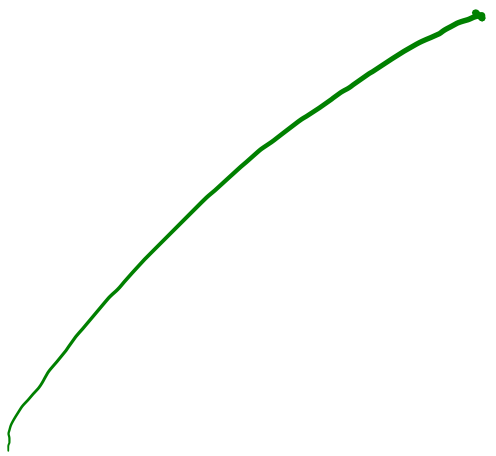
$$= (b_1 - a_1)x + (b_2 - a_2)x^2 + \dots + (b_n - a_n)x^n + (b_{n+1} - a_{n+1})x^{n+1} + O(n+2)$$

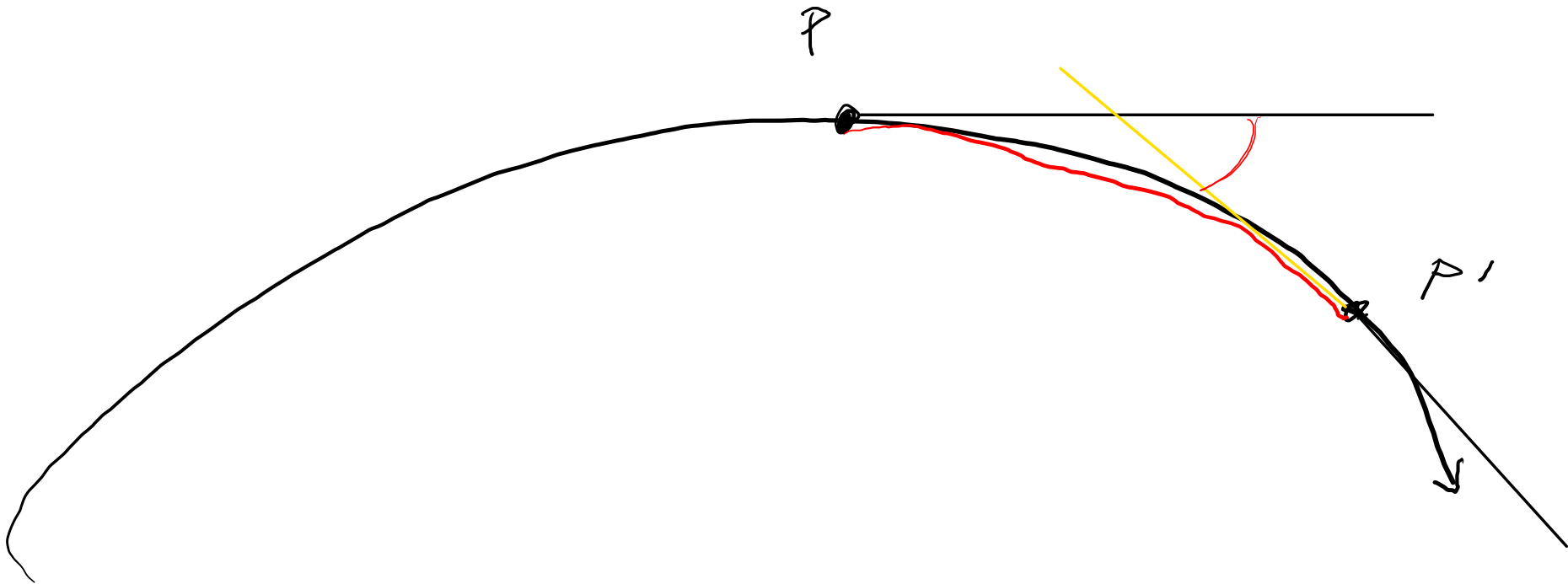
contatto di ordine n $\neq 0$

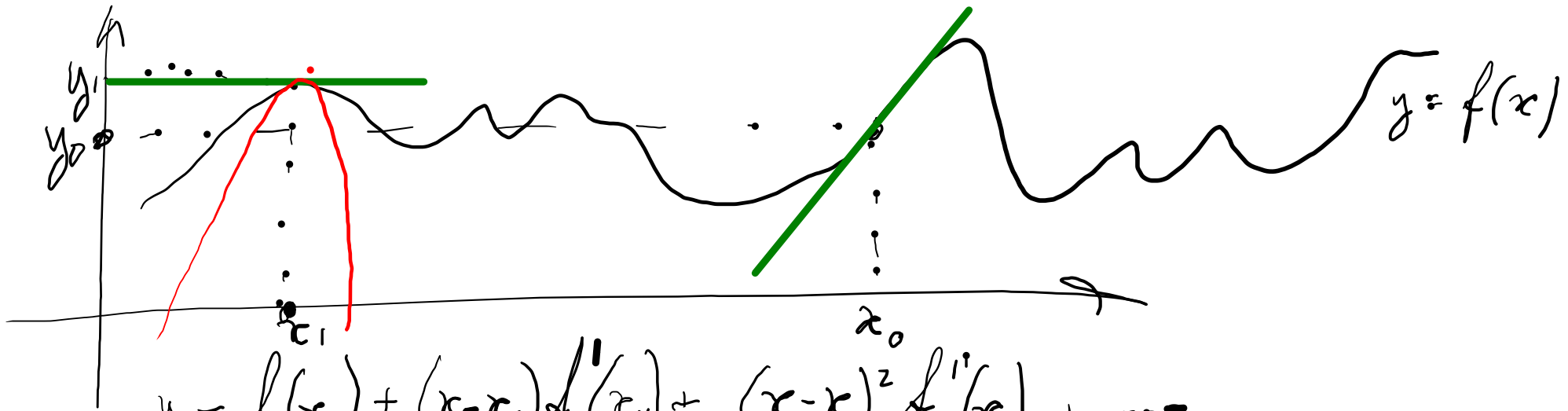
$$= (b_{n+1} - a_{n+1})x^{n+1} + O(n+2)$$











$$y = f(x_1) + (x-x_1)f'(x_1) + \frac{(x-x_1)^2}{2}f''(x_1) + \dots$$

