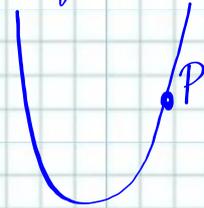


$$f: y = ax^2 + bx + c$$

$$P \in f \quad P(x_p, y_p)$$



$$\frac{y+y_p}{2} = a \left( \frac{x+x_p}{2} \right) + b \left( \frac{x+x_p}{2} \right) + c$$

$y$	$\rightarrow$	$\frac{y+y_p}{2}$
$x$	$\rightarrow$	$\frac{x+x_p}{2}$
$y^2$	$\rightarrow$	$y y_p$
$x^2$	$\rightarrow$	$x x_p$

$$\begin{cases} \text{fascio rette } P \in f \\ \text{parabola} \end{cases} \begin{cases} y - y_p = m(x - x_p) \\ y = ax^2 + bx + c \end{cases}$$

$$\begin{cases} ax^2 + bx + c - y_p = mx - mx_p \quad (*) \\ y - y_p = m(x - x_p) \end{cases}$$

(\*) equazione risolvente

$$ax^2 + x(b - m) + c - y_p + mx_p = 0$$

condizione di tangenza  $\Delta = 0$

