

$T_x(G) \cap G = T_y(G) \cap T_x(G) \cap G$, since $p \in l_x \subset h$.
 \Rightarrow By the recall above, $\sigma(p) = \overline{L_1 \cdot x}$ and $\sigma(h) = \overline{x \cdot L_2}$, where $Q \cap T_x(F) = L_1 \cup L_2$, $L_1 \cap L_2 \neq \emptyset$.

Of the four lines of $T_x(X) \cap X = T_x(F) \cap T_x(G) \cap G \cap F$, then, two will lie on the α -plane $\sigma(p)$ and two on $\sigma(h)$.

$F^*(F \cap L_1) = \#(F \cap L_2) = 2$ and $F \cap T_x(F) \cap T_x(G) \cap G$ is 4 lines. $\Rightarrow F \cap \sigma(h) =$ two lines ⁱⁿ $\sigma(h)$ and $F \cap \sigma(p) =$ two lines ^{are} in $\sigma(p)$.
 $\Rightarrow \sigma(p)$ is tangent to F at $x \Rightarrow l_x$ is singular
 $\Rightarrow x \in \Sigma$

Conversely, if $T_x(F)$ is nowhere tangent to G , then the locus $T_x(F) \cap T_x(G) \cap G$ will just be the cone over the smooth conic $T_x(F) \cap Q$, and no two of the lines of $T_x(X) \cap X$ will lie on the same α -plane $\sigma(p)$ — unless, of course, F is tangent to $T_x(F) \cap Q$, i.e., $T_x(X) \cap X$ contains a multiple line. (See Figure 16.)

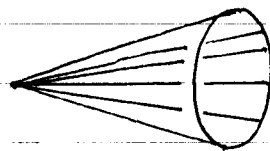


Figure 16. $T_x(G) \cap T_x(F) \cap G$ if $x \notin \Sigma$.