Note that the genus of a smooth D_V is then given by

$$\pi(D_V) = \frac{D_V \cdot D_V}{2} + 1 = 17.$$

⌜ D_V is a smooth curve since $\dim A = 2$.

$$\pi(D_V) = \frac{K_A \cdot D_V + D_V \cdot D_V}{2} + 1 = \frac{D_V \cdot D_V}{2} + 1 = \frac{32}{2} + 1$$

by $K_A = 0$ P779 and $\#(D_V \cdot D_V) = \#$ of base points. ⌟

A second family of curves on A, more fundamental than the curves D_V, are the incidence divisors $B_L \subset A$, defined to be the set of lines on X meeting a given line L. More precisely — since it is not a priori clear when L itself is to be counted among the lines meeting L — we will define B_L to be the closure in A of the set of lines $L' \in A - \{L\}$ meeting L; the Levi theorem assures us that B_L is analytic, and we will see later under what circumstances $L_0 \in B_{L_0}$.

⌜ $K = \{ L \subset \mathbb{P}^5 \mid L \cap L_0 \neq \phi \}$ is a subvariety of $G(2,6)$. $\Rightarrow$ $K - \{L_0\}$ is a subvariety of $G(2,6) - \{L_0\}$, and $K \cap A - \{L_0\}$ is a subvariety of $A - \{L_0\}$ $\Rightarrow$ $\dim \{L_0\} = 0$, $\dim A = 2$, and