As promised, we can now describe geometrically the group law on A. There are basically two ingredients in this construction. The first is to note that the sum on A of four lines comprising the intersection of X with a 3-plane V is constant. This is because if $V \cdot X = L_1 + L_2 + L_3 + L_4$, then by the argument of P. 784, we may write

$$
\begin{aligned}
D_V &= B_{L_1} \cup B_{L_2} \cup B_{L_3} \cup B_{L_4} \\
&= (B_{L_0} - L_1) \cup (B_{L_0} - L_2) \cup (B_{L_0} - L_3) \cup (B_{L_0} - L_4) \\
&= 3 B_{L_0} \cup (B_{L_0} - L_1 - L_2 - L_3 - L_4).
\end{aligned}
$$

☞ $e^{-2\pi i (4 z_\alpha - \mu_{1\alpha} - \mu_{2\alpha} - \mu_{3\alpha} - \mu_{4\alpha})} \equiv e_{\lambda_{\alpha+n}}$

$e^{-2\pi i (3 z_\alpha)} \cdot e^{-2\pi i (z_\alpha - \mu_{1\alpha} - \cdots - \mu_{4\alpha})} \equiv e_{\lambda_{\alpha+n}}$.

Since all divisors D_V are linearly equivalent, and since no translation of A fixes B_{L_0}, it follows that the sum $L_1 + L_2 + L_3 + L_4$ does not depend on V.

☞ See P780, the definition of D_V.

See P948 note. ⇒ All divisors D_V are linearly equivalent. B_{L_0} is a theta divisor ⇒ By P317, no translation of A fixes B_{L_0} except the identity.

$$
\begin{aligned}
D_{V'} &= B_{L_1'} \cup B_{L_2'} \cup B_{L_3'} \cup B_{L_4'} \\
&= 3 B_{L_0} \cup (B_{L_0} - L_1' - L_2' - L_3' - L_4')
\end{aligned}
$$