We shall give the precise definitions and derive the finiteness theorem in a different way. Two effective divisors D_1, D_2 are algebraically equivalent in the strong sense, written

$$D_1 \equiv D_2,$$

if there is a connected parameter variety T with marked points $t_1, t_2 \in T$ and divisor D on $M \times T$ such that

$$D \cdot M \times \{t_i\} = D_i \qquad (i = 1, 2).$$

⌈⌈ It is like a cobordism. ⌋

Intuitively, there is an algebraic family D_t $(t \in T)$ of divisors connecting D_1 and D_2.

⌈⌈ $D \cdot M \times \{t\} = D_t$. ⌋

Two divisors D_1, D_2 are algebraically equivalent, written $D_1 \equiv D_2$, if there is a divisor D such that both of $D + D_i$ are effective and $D + D_1 \underline{\underline{\equiv}} D + D_2$. We will see in a minute that this is an equivalence relation compatible with the group structure on $Div(M)$.

⌈⌈ $D_1 \equiv D_2$ & $D_2 \equiv D_3 \overset{?}{\Rightarrow} D_1 \equiv D_3$.

$\Rightarrow$ $D_1 + L = D_2 + L$ & $D_2 + L' = D_3 + L'$

$\Rightarrow$ $D_1 + L + L' = D_2 + L + L' = D_3 + L' + L$ $\Rightarrow$ By adding