

## algebraic equivalence of divisors

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Author alozano (2414) Entry type Definition Classification msc 14C20 Let X be a surface (a two-dimensional algebraic variety).

- **Definition 1.** 1. An algebraic family of effective divisors on X parametrized by a non-singular curve T is defined to be an effective Cartier divisor  $\mathcal{D}$  on  $X \times T$  which is flat over T.
  - 2. If  $\mathcal{F}$  is an algebraic family of effective divisors on X, parametrized by a non-singular curve T, and  $P,Q \in T$  are any two closed points on T, then we say that the corresponding divisors in  $\mathcal{F}$ ,  $D_P, D_Q$ , are prealgebraically equivalent.
  - 3. Two (Weil) divisors D, D' on X are algebraically equivalent if there is a finite sequence  $D = D_0, D_1, \ldots, D_n = D'$  with  $D_i$  and  $D_{i+1}$  prealgebraically equivalent for all  $0 \le i < n$ .