$- L_{q_0} \cdot E_D \Rightarrow \quad L_{q_3} \cdot E_D - p = L_{q_1} \cdot E_D - p + L_{q_2} \cdot E_D - p$

$\Rightarrow \quad D_{q_3} = D_{q_1} + D_{q_2}$

$\Rightarrow \{D_q\}_{q \in C}$ is a linear system

By ① & ②, $\{D_q = L_q \cdot E_D - p\}$ is a linear system of degree 2.

By Riemann-Roch,

$h^0(D_q) = 2 - 2 + 1 + h^0(K_B - D_q)$

$= 2$, since $\deg(K_B - D_q) \neq 0$, and $K_B = D_q$.

For, by p247,

if $K_B \neq D_q$, then $h^0(D_q) = 1$, which is impossible since C is 1-dimensional, and $\dim\{D_q\} = 1$.

In other words, every D_q is linearly equivalent to K_B. $\Rightarrow$ In the book, the authors put $K_B = D_0$.

」

Thus the divisor $D = H \cdot E_D$ on B is of the form

$$D = 2D_0 + p.$$

「 $H \cdot E_D = L_{q_1} \cdot E_D + L_{q_2} \cdot E_D - p = D_0 + p + D_0 + p - p$
$= 2D_0 + p.$

」

Conversely, suppose that D is of the form $2D_0 + p$ for some $p \in E_D$ (or B). Then the divisors