A divisor $D = \Sigma a_i V_i$ is called effective if $a_i \geq 0$ for all i; we write $D \geq 0$ for D effective.
An analytic hypersurface V will usually be identified with the divisor ΣV_i, where the V_i's are the irreducible components of V.

Let $V \subset M$ be an irreducible analytic hypersurface, $p \in V$ any point, and f a local defining function for V near p. For any holomorphic function g defined near p, we define the order $\mathrm{ord}_{V,p}(g)$ of g along V at p to be the largest integer a s.t in the local ring $\mathcal{O}_{M,p}$,

$$g = f^a \cdot h, \quad h \text{ holomorphic function.}$$

By the result from p.10 that relatively prime elements of $\mathcal{O}_{M,p}$ stay relatively prime in nearby local rings,

we see that for g a holomorphic function on M, $\mathrm{ord}_{V,p}(g)$ is independent of p. Thus we can define the order $\mathrm{ord}_V(g)$ of g along V to be simply the order of g along V at any point $p \in V$.

$\ulcorner$ Since V is irreducible, f is irreducible by p.12.

Suppose g is a holomorphic function on M.
At a point $p \in M$, let $\mathrm{ord}_{V,p}(g) = a$.
Let $\{x \in V \mid \mathrm{ord}_{V,x}(g) = a\} := K$.

$U' \subset U$

In $g = f^a h$ for some nbd U of p, since a is the largest number, f can not divide h in any nbd U' of p.
In other words, $[f]$ and $[h]$ are relatively prime in $\mathcal{O}_{M,p}$.
$\Rightarrow$ By P10, proposition and irreducibility of f, $[f],[h]$ are relatively prime again in $\mathcal{O}_{M,q}$ for $q \in$ some nbd V' of p, where