


Assignments 6.3

一、阅读 (Reading)

1. 阅读教材.
2. 课外阅读:

 Set Theory (3) -Equivalence Relation.pdf

 Boundary Value Analysis _Equivalence Partitioning with Examples.pdf

二、问题解答 (Problems)

1. 教材 P103: 题 23, 24, 25, 26, 27, 28, 31.
2. An interesting consequence of equivalence relations and partitions is that any function f can be factored (分解) into a composition of two functions, one an injection (单射) and one a surjection (满射). For a function $f: A \rightarrow B$, let P be the partition of A by the kernel relation R of f , that is, aRb iff $f(a)=f(b)$ for a,b in A . Then define the function $s: A \rightarrow P$ by $s(a) = [a]_R$ and define $i: P \rightarrow B$ by $i([a]_R) = f(a)$. Please prove that s is a surjection, i is an injection, and $f = i \circ s$.
(如果不熟悉函数, 请先自学函数一章相关内容后再完成此题。)

三、项目实践 (Programming) (Optional)

1. 编写程序, 设计并实现等价类求解算法, 并举例验证。