

Exam 4.

The solutions are due Wednesday May 2. Either leave them under my office door (456 Little Hall) or send them by e-mail to my address (preferably in pdf).

1. Show that the function enumerating primes in increasing order is primitive recursive.
2. Show that every countable set of many-one degrees has an upper bound.
3. Let $f \in \omega^\omega$ be a total recursive function. Show that there is a simple set $a \subset \omega$ such that for every n , $|a \cap f(n)| \leq n$. *Hint.* Adjust the priority argument from class.