

Final exam—May 2, 2:00 PM
Closed book section (40 points)

The exam is to be turned in at 5:00 PM.

Work the closed book section first and turn it in before you consult your books and notes to work on the open book section. For the closed book section, write your answers on the exam itself. For the open book section, write your answers on separate pieces of paper.

University regulations require that you sign the following pledge on the first page of your turned-in exam.

I have neither received nor given any unauthorized aid on this exam. _____

Problem 1. (24 points—3 points each)

Give short definitions (one or two phrases or sentences) of the following terms.

datagram

hashing

inode

ports (concerning sockets)

process table

switch table

Unix

window (as in the X window system)

Problem 2. (12 points–3 points each)

Give a brief description of what the following UNIX system calls do at the user level. *You don't need to describe the implementation but say something about what they return.*

`execve(path, argv, envp)`

`fork()`

`sendto(s, msg, msg_len, flags, to, to_len)`
ignore the msg_len, flags, and to_len parameters

`setuid(uid)`
be sure to mention when it fails

Problem 3. (4 points)

Name the three regions of a Unix process and describe *briefly* (five words or less for each) their contents.