Part 3
I set up the test cases where I have 4 sendblks A, B, C, D, where receive is manually called 4 times in a process rcvtest.c. The rcvtest process priority is 10 while the sendblks are priority 20.

To see what send does to multiple messages I change the sendblk processes in main to send. Only the first message is printed.

When the receiver process terminates before the processes are blocked in its send queue, the process will just stay in limbo as the send queue is gone and that is the only reference to the blocked processes.

Part 4
The async function is called back in sleep where the interrupts are enabled. This means that the callbacks are done in user mode in XINU. This is compatible as it makes sure it does not run in kernel mode which other OS with isolation/protection would not work. The callback function works with multiple sendblks in one process and sendblks in multiple processes.