chan values[n](int smallest, int largest);

process P[0] {  # initiates the exchanges
    int v;    # assume v has been initialized
    int smallest = v, largest = v;    # initial state
    # send v to next process, P[1]
    send values[1](smallest, largest);
    # get global smallest and largest from P[n-1] and
    # pass them on to P[1]
    receive values[0](smallest, largest);
    send values[1](smallest, largest);
}

process P[i = 1 to n-1] {
    int v;    # assume v has been initialized
    int smallest, largest;
    # receive smallest and largest so far, then update
    # them by comparing their values to v
    receive values[i](smallest, largest)
    if (v < smallest)
        smallest = v;
    if (v > largest)
        largest = v;
    # send the result to the next processes, then wait
    # to get the global result
    send values[(i+1) mod n](smallest, largest);
    receive values[i](smallest, largest);
}

Figure 7.13  Exchanging values using a circular ring.