4. (a) 215 ticks possible = 32768 ticks \* 100ms = 3276.8 sec per cycle. 3276.8 − 60 = 3216.8 sec.

(b) 240 numbers / min = 4 numbers / sec…

5. Otherwise lost packets might get mistakenly ack’ed.

6. Deadlocks are possible; suppose machine 1 gets a random packet and ack’s it, but the ack gets lost. Now machine 1 is waiting for more data, but the originating machine (0) has no idea that it is, so doesn’t send. Now if machine 0 has the same thing happen to it, both machines are waiting for data that will not be sent, aka deadlock.

7. Token ring with sufficiently-many messengers might work in this situation, as each general would know that the probability of losing all messenger is low, and thus at least two generals know (either the one before him/after him and himself).