Informal Quiz 3

True or False?

☐ ☐ The Nagle algorithm in TCP is intended to allow the ack and echo data to be combined.

☐ ☐ TCP is called “self-clocking” because the source sends traffic whenever it likes.

☐ ☐ TCP by default uses a selective retransmission policy.

☐ ☐ The RFC 793 RTT estimator could only tolerate variances of up to 30%.

☐ ☐ The TCP congestion control algorithm is stable because it detects congestion reliably and its rate of window decrease is faster than its rate of window increase.
TCP’s use of cumulative acks reduces the need for any timeout/retransmission of acks.

Karn’s algorithm would be triggered often on a wireless or radio link which is very lossy.

Delayed-acks are good for bulk traffic, but bad for interactive traffic.

The complexity in RIP is in avoiding problems like the count-to-infinity, whereas the complexity in OSPF is in distributing the link states efficiently.

The Bellman-Ford algorithm is used in policy-based distance-vector routing for BGP.

A distance vector approach has a complete network map at every node.
The Dijkstra algorithm is a “greedy” algorithm.

Diffusing computations (e.g., DUAL) works because inconsistent information is not accepted while the routing tables are “frozen”.

Default routing works because there exists a set of “core” routers which do not use default routing.

BGP uses a fixed tree structure to propagate reachability information from AS to the core.

CIDR solves the router-table size explosion problem by allocating only contiguous blocks of addresses which are summarizable.

The MED and LOCAL_PREF attributes in BGP can be used for load-balancing.
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