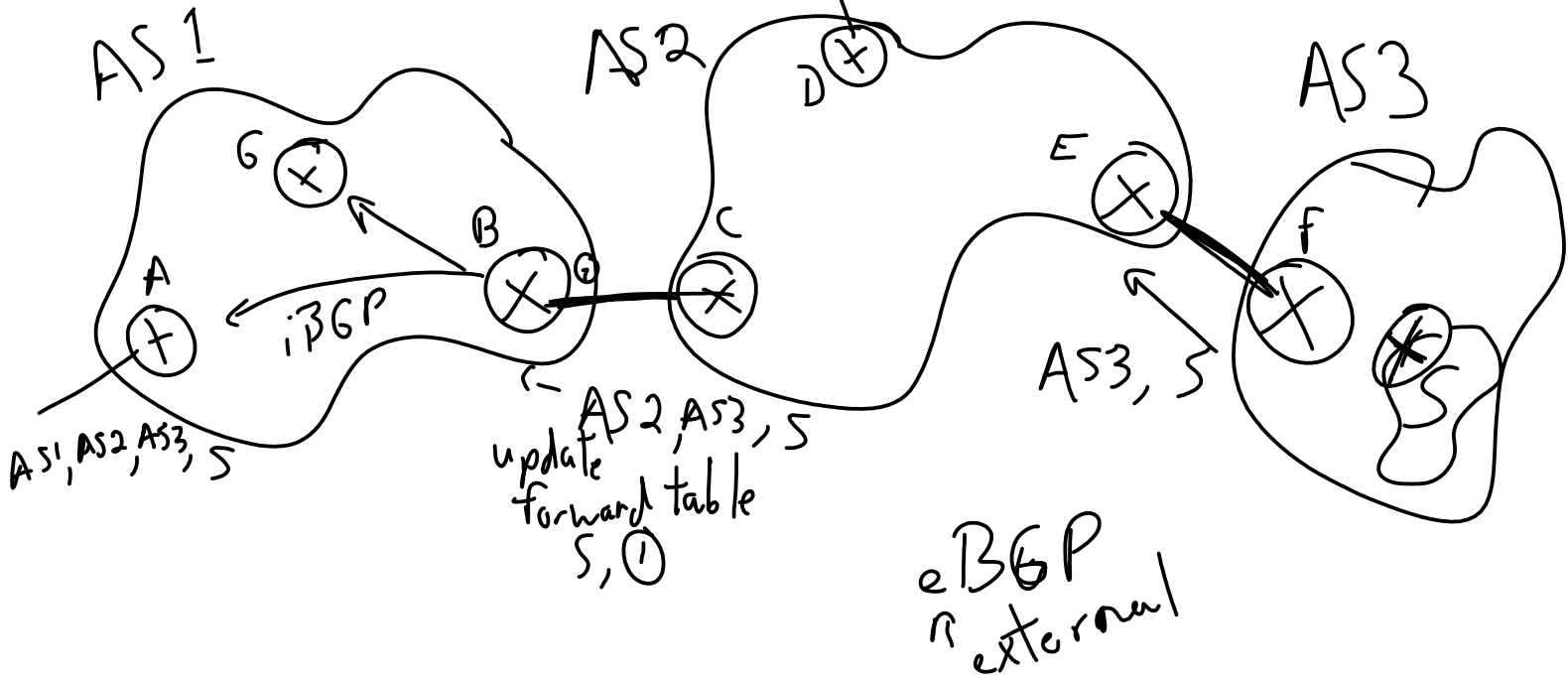
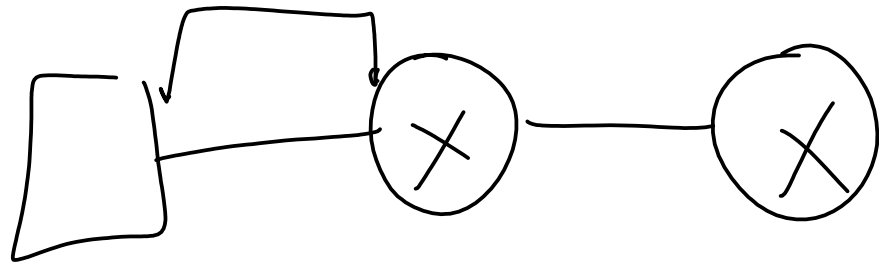


BGP: border gateway protocol

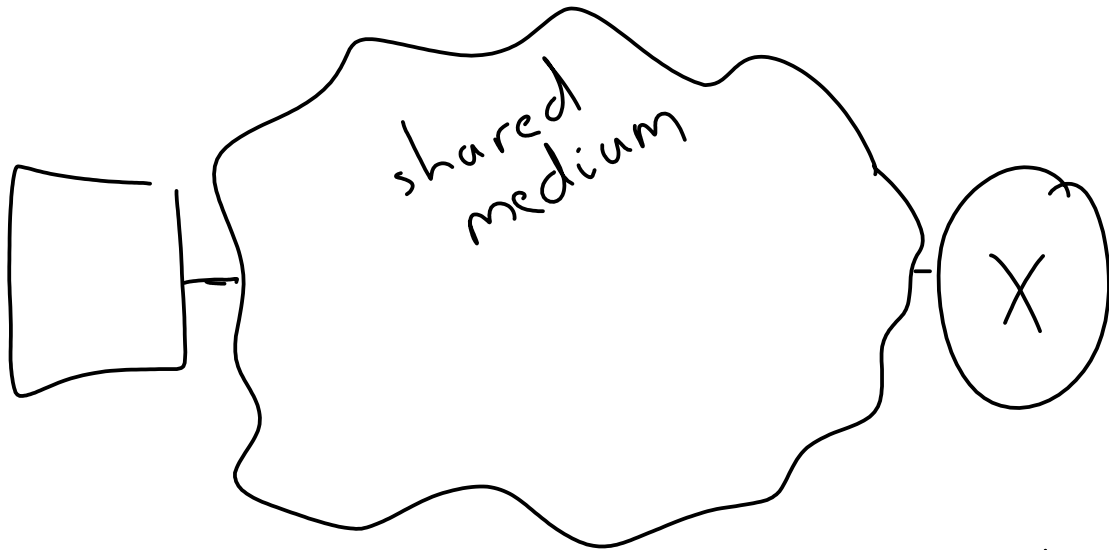


Data Link Layer

adjacent devices



shared \Rightarrow

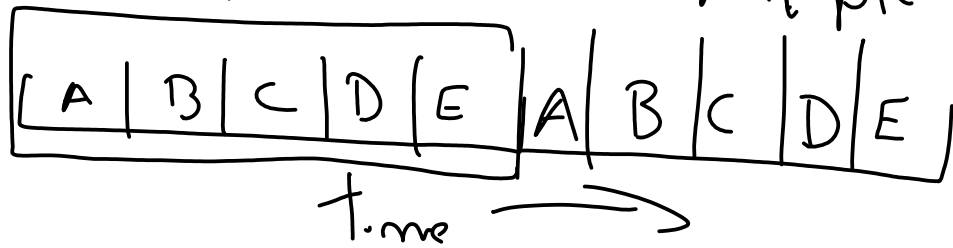


Multiple Access Protocols

MAC: media access control

① channel partitioning

TDMA: time division mult. ple-access



- unused slots

- synch. issues

FDMA: frequency division

② Random access protocol

- wait and send

- collisions

CSMA: carrier sense multiple access

- listen before sending

- send message

CSMA/CD: CSMA + collision detection

backoff

[choose a random k
 m^{th} collision $\{0, 1, 2, \dots, 2^m - 1\}$
 k # of 512 bit transmit

3. Token Passing (Taking turns)
- message indicates I can send
 - pass the token msg.
-

Polling

- controller indicates who gets to talk