

Example: 1d ( $\equiv$  src) sends a datagram to x (dst). How does 1d comp. next hop in fwd table?

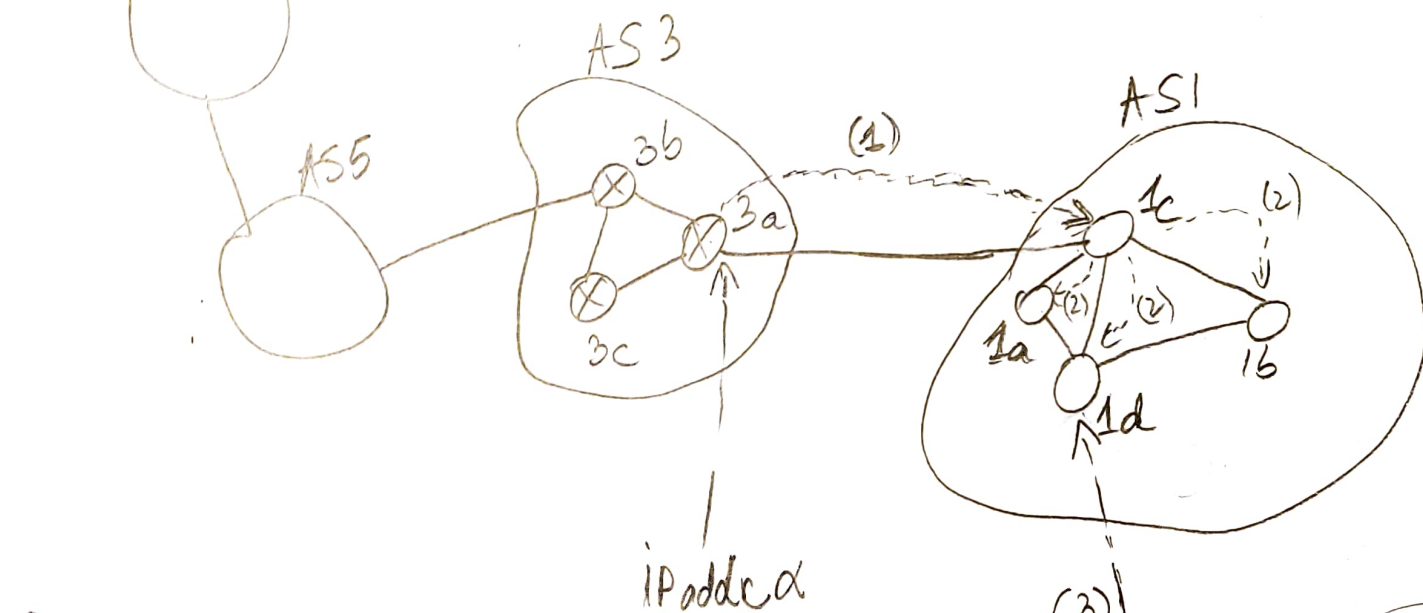
cidr prefix AS9  
abcd/24 x

(1) eBGP: 3a adv. to 1c route<sub>x</sub> = (x; AS8 AS5 AS3; IP address)  
AS-PATH NEXT-HOP

(2) iBGP: 1c adv. route<sub>x</sub> to 1a, 1b, 1d

(3) 1d uses intra-AS routing prot. (RIP or OSPF) and IP address to compute entry (x, 1a)

( $\hookrightarrow \equiv$  least-cost path to 1c-3a)



① Each router runs both Intra- and Inter-AS rout. alg.

(A) Intra-AS routing alg. (RIP or OSPF)

$\hookrightarrow$  for internal dst. in AS1

(B) Intra-AS & Inter-AS (BGP) rout. alg.

$\hookrightarrow$  for external dst.

