

CS253 HW10

will Trudy be able to see original contents of datagram? How about source, dest IP address, transport protocol, application port?

Original contents of datagram/source and dest IP address: Unable since they are encrypted with unknown keys.

Transport protocol and application port: Able since they are written in the TCP protocol directly.

flip bits without detection?

No since receiver can check it by MAC.

masquerade as R1 using R1's IP address?

No since Trudy doesn't have keys so the encrypted payload will be ignored by the receiver.

replay a datagram?

No since we have IPSec sequence number.