IP Security

1. Give examples of applications of IPSec.
2. What parameters identify an SA and what parameters characterize the nature of a particular SA?
3. What is a replay attack?
4. What are the basic approaches to bundling SAs?
5. In discussing AH processing, it was mentioned that not all of the fields in an IP header are included in MAC calculation.

   a. For each of the fields in the IPv4 header, indicate whether the field is immutable, mutable but predictable, or mutable (zeroed prior to ICV calculation).
   b. Do the same for the IPv6 header.

   In each case, justify your decision for each field.