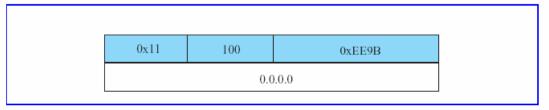
Homework 5, Chapter 10: IGMP

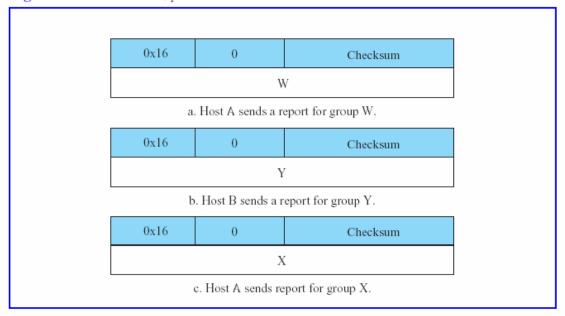
20. The following message is sent by the router to monitor membership in any of the groups. See Figure 10.1

Figure 10.1 Exercise 20



The following messages are sent to preserve membership in the groups. Since reports are sent at random times, there is more than one correct set of messages that can be sent in response to the membership query—this is one possibility. See Figure 10.2.

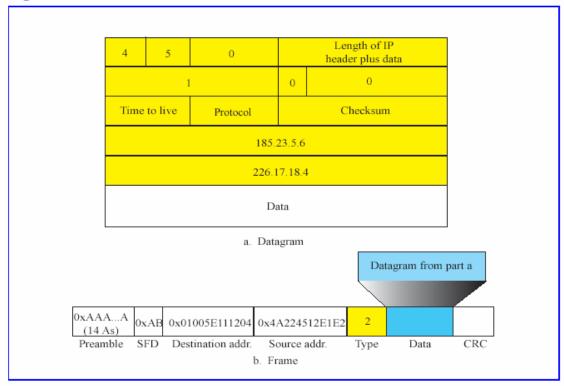
Figure 10.2 Exercise 20, part 2



Note that since no reports were sent to the router claiming membership to group Z, this group will be dropped from the group table in the router.

30. The router will not need the services of ARP because the frame is broadcast at the physical address level. See Figure 10.9.

Figure 10.9 Exercise 30



37. When the router receives the report from the host, it should create a new entry in its group table setting the state for the group to Delaying. It should also set a timer. When the timer expires, it should send a report message to the next higher router in the spanning tree. See Figure 10.13.

Figure 10.13 Exercise 37

