1. What is the 48-bit Ethernet address of your computer?
    a. **3c:06:30:0a:7e:ca**

2. What is the 48-bit destination address in the Ethernet frame? Is this the Ethernet address of gaia.cs.umass.edu? (Hint: the answer is no). What device has this as its Ethernet address? [Note: this is an important question, and one that students sometimes get wrong. (Re-)read Section 6.4 in the text and make sure you understand the answer here.]
    a. **00:50:e8:04:5f:09**
    b. **No they don't match**
    c. **The Ethernet is my local router**

3. Give the hexadecimal value for the two-byte Frame type field. What upper layer protocol does this correspond to?
    a. **0x0800**
    b. **This corresponds with the Internet Protocol**

4. How many bytes from the very start of the Ethernet frame does the ASCII "G" in "GET" appear in the Ethernet frame?
    a. **54 Bytes**

5. What is the value of the Ethernet source address? Is this the address of your computer, or of gaia.cs.umass.edu (Hint: the answer is no). What device has this as its Ethernet address?
    a. **00:50:e8:04:5f:09**
    b. **No it is not**
    c. **The Ethernet is the router**

6. What is the destination address in the Ethernet frame? Is this the Ethernet address of your computer?
    a. **3c:06:30:0a:7e:ca**
    b. **Yes, it is the same**

7. Give the hexadecimal value for the two-byte Frame type field. What upper layer protocol does this correspond to? (Ethernet II-> Type)
    a. **0x0800**
    b. **This corresponds with the Internet Protocol**

8. How many bytes from the very start of the Ethernet frame does the ASCII "O" in "OK" (i.e., the HTTP response code) appear in the Ethernet frame?
    a. **67 Bytes**

9. What are the hexadecimal values for the source and destination addresses in the Ethernet frame containing the ARP request message?

a. **Destination: ff:ff:ff:ff:ff:ff**
b. **Source: 3c:06:30:0a:7e:ca**

10. Give the hexadecimal value for the two-byte Ethernet Frame type field. What upper layer protocol does this correspond to?
    a. **0x0806**
    b. **The corresponding upper layer protocol is ARP**

11. Where in the ARP request does the "question" appear – the Ethernet address of the machine whose corresponding IP address is being queried?
    a. **The Target MAC address is 00:00:00:00:00:00, this broadcast will query the machine which IP address is 172.120.18.43.**

12. Now find the ARP reply that was sent in response to the ARP request. Where in the ARP message does the "answer" to the earlier ARP request appear – the IP address of the machine having the Ethernet address whose corresponding IP address is being queried?
    a. **Sender IP address: 172.20.18.43 and Sender MAC address: 30:e0:4f:27:b5:bc does the "answer" to the earlier ARP request.**

13. What are the hexadecimal values for the source and destination addresses in the Ethernet frame containing the ARP reply message?
    a. **Destination: 3c:06:30:0a:7e:ca**
    b. **Source: 30:e0:4f:27:b5:bc**