Lab 5

1. a4:5e:60:e9:58:ab
2. 38:2c:4a:9a:a6:20; This is actually my router’s Ethernet address.
3. 0x0800 which indicates that it is the IP Protocol.
4. 66 bytes from the start.
5. 0x0d 0x0a 0x0d 0x0a
6. 38:2c:4a:9a:a6:20; The destination is my router.
7. a4:5e:60:e9:58:ab; My computer’ card.
8. 0x0800; Signifies the IP Protocol frame.
9. 78 bytes until the OK starts.
10. 0x3e 0x0a 0x0d 0x3c
11. Source: 38:2c:4a:9a:a6:20 ; Destination: a4:5e:60:e9:58:ab
12. 0x0806 indicating an ARP request
13. 1. 19 bytes before it reaches the opcode
    2. 0x00 0x01 indicating request
    3. Yes, its 192.168.29.1
    4. Bytes 32 through 37 consist of the targeted Ethernet address.
14. 1. 19 bytes before it reaches the opcode
    2. 0x0002 indicating reply
    3. 7 bytes after the opcode since the 6 bytes after the opcode are utilized for the Ethernet address of the machine being queried.
15. Source: a4:5e:60:e9:58:ab ; Destination: 38:2c:4a:9a:a6:20
16. There is no reply to the ARP request because there is no match to the local machines’ hardware address.