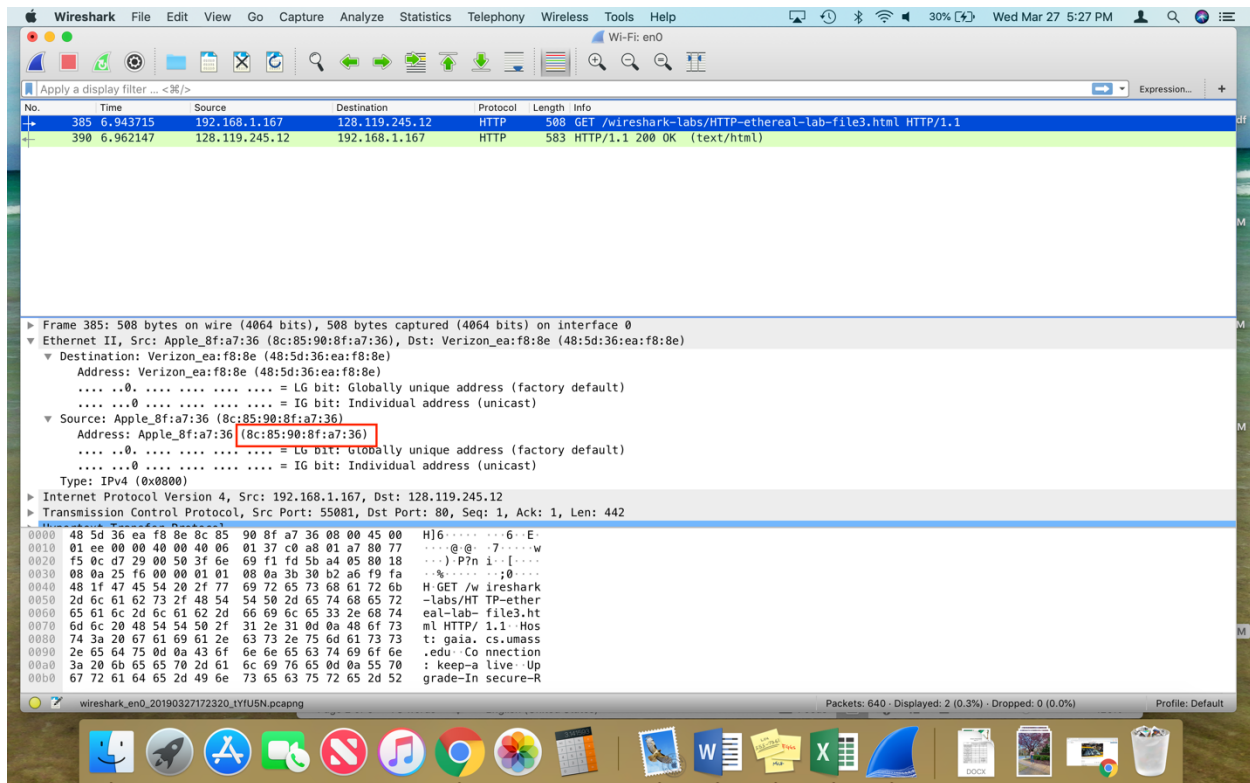


```
Terminal Shell Edit View Window Help
Amreenie --bash-- 203x64

Last login: Wed Mar 20 20:45:46 on ttys000
Amreens-MBP:~$ Amreenie$ ifconfig
lo0: flags=8049<UP,LOOPBACK,RUNNING,MULTICAST> mtu 16384
    options=1203<RXCSUM,TXCSUM,TXSTATUS,SW_TIMESTAMP>
    inet 127.0.0.1 netmask 0xff000000
    inet6 ::1 prefixlen 128
    inet6 fe80::1::lo0 prefixlen 64 scopeid 0x1
    nd6 options=201<PERFORMNUD,DAD>
gif0: flags=8010<POINTOPOINT,MULTICAST> mtu 1280
stf0: flags=0<> mtu 1280
XHC0: flags=0<> mtu 0
XHC20: flags=0<> mtu 0
en1: flags=8963<UP,BROADCAST,SMART,RUNNING,PROMISC,SIMPLEX,MULTICAST> mtu 1500
    options=60<TS04,TS06>
    ether aa:00:75:09:48:01
    media: autoselect <full-duplex>
    status: inactive
en2: flags=8963<UP,BROADCAST,SMART,RUNNING,PROMISC,SIMPLEX,MULTICAST> mtu 1500
    options=60<TS04,TS06>
    ether aa:00:75:09:48:00
    media: autoselect <full-duplex>
    status: inactive
en0: flags=8863<UP,BROADCAST,SMART,RUNNING,SIMPLEX,MULTICAST> mtu 1500
    ether 8c:85:98:8f:a7:36
    inet6 fe80::3b:4046:94a2:c429%en0 prefixlen 64 secured scopeid 0x8
    inet 192.168.1.167 netmask 0xfffff00 broadcast 192.168.1.255
    nd6 options=201<PERFORMNUD,DAD>
    media: autoselect
    status: active
bridge0: flags=8863<UP,BROADCAST,SMART,RUNNING,SIMPLEX,MULTICAST> mtu 1500
    options=63<RXCSUM,TXCSUM,TS04,TS06>
    ether aa:00:75:09:48:01
    Configuration:
        id 0:0:0:0:0:0 priority 0 hellotime 0 fwhdelay 0
        maxage 0 holdcnt 0 proto stp maxaddr 100 timeout 1200
        root id 0:0:0:0:0:0 priority 0 ifcost 0 port 0
        ipfilter disabled flags 0x2
        member: en1 flags=3<LEARNING,DISCOVER>
            ifmaxaddr 0 port 6 priority 0 path cost 0
        member: en2 flags=3<LEARNING,DISCOVER>
            ifmaxaddr 0 port 7 priority 0 path cost 0
    nd6 options=201<PERFORMNUD,DAD>
    media: <unknown type>
    status: inactive
p2p0: flags=8843<UP,BROADCAST,RUNNING,SIMPLEX,MULTICAST> mtu 2304
    ether 0e:85:98:8f:a7:36
    media: autoselect
    status: inactive
awd10: flags=8943<UP,BROADCAST,RUNNING,PROMISC,SIMPLEX,MULTICAST> mtu 1484
    ether 0e:41:99:78:24:a0
    inet6 fe80::c41:99ff:fe78:24a0%awd10 prefixlen 64 scopeid 0xb
    nd6 options=201<PERFORMNUD,DAD>
    media: autoselect
    status: active
```

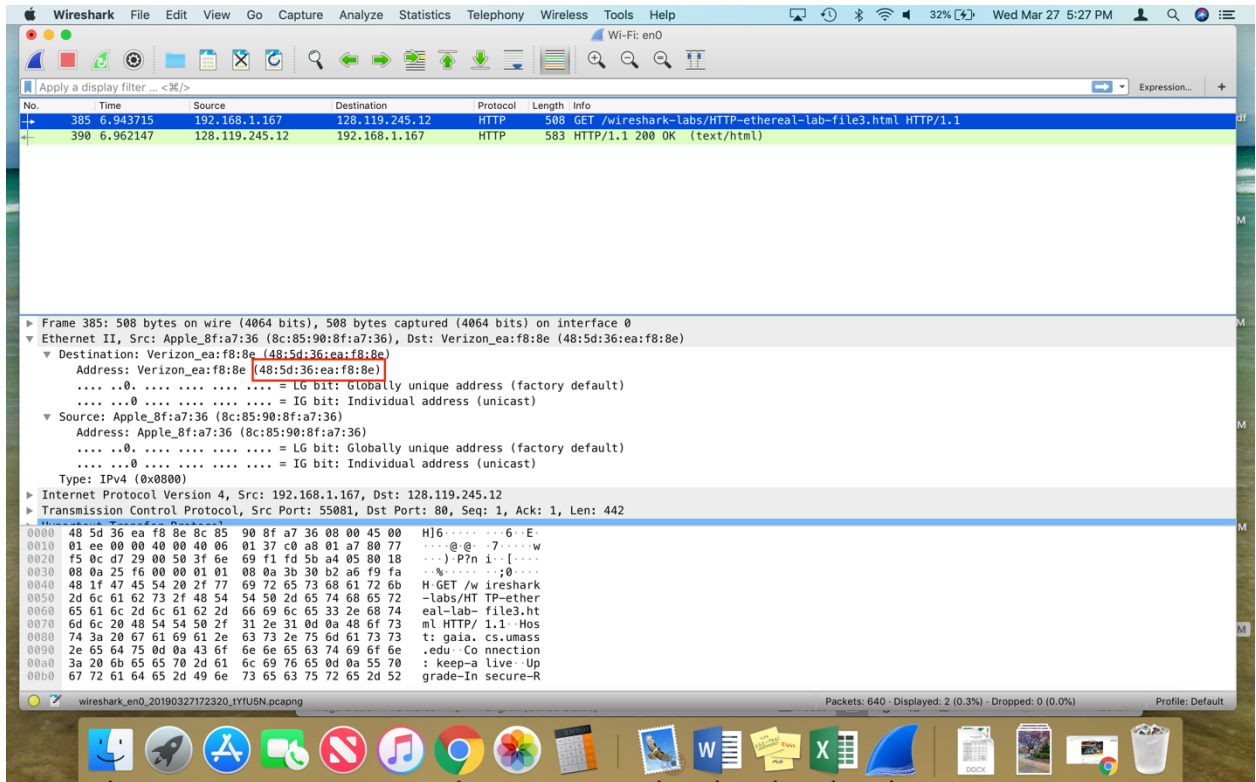
1. What is the MAC address from your computer?

It is 8c:85:90:8f:a7:36.



2. What is the destination MAC address?

The source MAC address is 48:5d:36:ea:f8:8e.



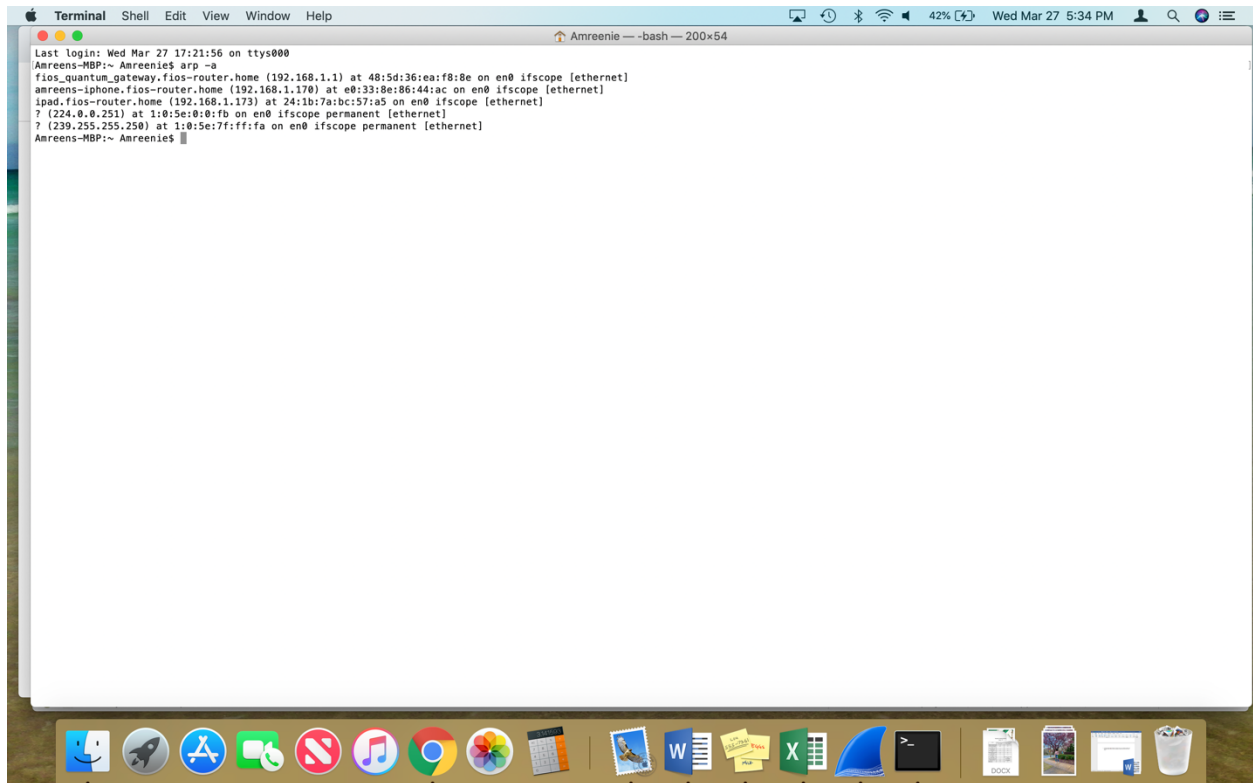
3. What device has the MAC address shown in the destination?

The router is the MAC address shown at the destination.

4. Explain the relationship between the destination MAC address and the destination IP address.

MAC Addresses are used on different local ethernet networks while IP addresses are used on networks. Another thing to note is that the MAC address delivers data to a device on a network whereas the IP Address is what carries that data to a device. The two are needed so that data can be sent over a network. The two basically identify a device on a network; the MAC address is the physical address used by machines. The IP address is the address for connecting to the internet; both together are needed to access the internet.

- Using the terminal (cmd in Windows, Terminal in mac), run a command to display your full ARP list table. (Find out what the command is, and print a full screen shot of your result.)



The screenshot shows a macOS Terminal window with the title bar "Terminal" and menu items "Shell", "Edit", "View", "Window", and "Help". The window title also includes "Amreenie — -bash — 200x54". The terminal content shows the following commands and output:

```
Last login: Wed Mar 27 17:21:56 on ttys000
Amreens-MBP:~ Amreenie$ arp -a
fios_quantum_gateway.fios-router.home (192.168.1.1) at 48:5d:36:ea:f8:8e on en0 ifscope [ethernet]
amreens-iphone.fios-router.home (192.168.1.170) at e0:33:8e:86:44:ac on en0 ifscope [ethernet]
ipad.fios-router.home (192.168.1.173) at 24:1b:7a:bc:57:a5 on en0 ifscope [ethernet]
? (224.0.0.251) at 1:0:5e:0:0:fb on en0 ifscope permanent [ethernet]
? (239.255.255.250) at 1:0:5e:7f:ff:fa on en0 ifscope permanent [ethernet]
Amreens-MBP:~ Amreenie$
```

The macOS dock is visible at the bottom of the screen, containing icons for various applications including Finder, Launchpad, App Store, Messages, Photos, Music, Google Chrome, Safari, Calendar, Mail, Word, Excel, PowerPoint, and a trash can.