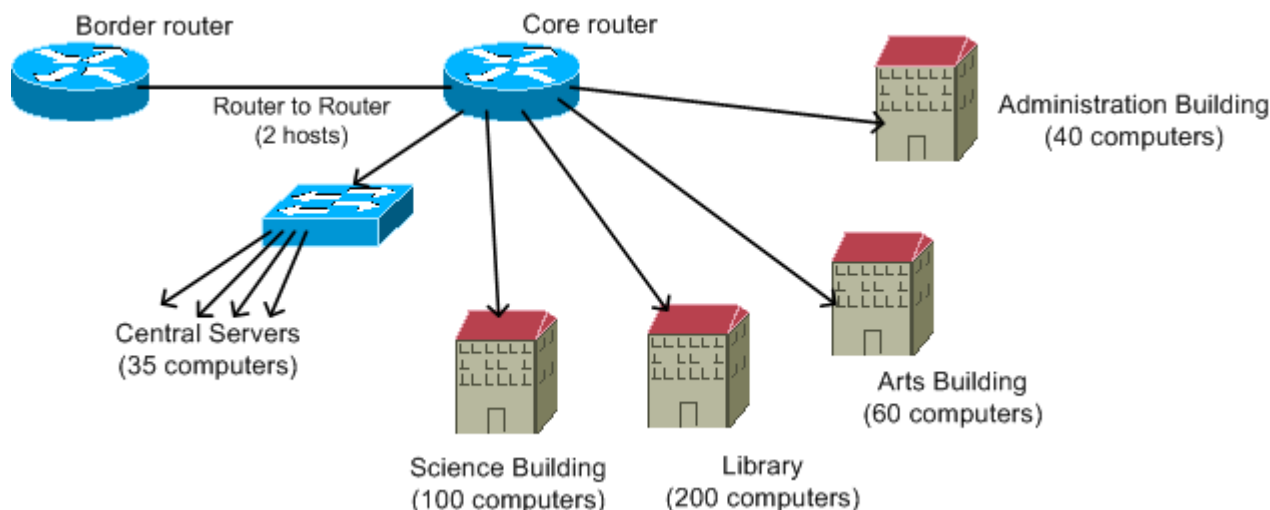# IP Addressing Exercise

The purpose of this exercise is to work out the IPv4 and IPv6 subnet sizes needed for each link and building in the following simple campus. Along with the subnet size, also assign a suitable address block to service the subnet.

Consider the following simple network (very similar to example in the presentation):

Fill out the IPv4 and IPv6 subnet sizes for each network in the following table.

Once you have worked out the subnet sizes, assign an address block to each subnet:

- For IPv4, make your subnet assignments from the 172.16.0.0/12 space.
- For IPv6, make your subnet assignments from the 2001:DB8::/32 space.

Network	Number of Devices	IPv4 Subnet Size	IPv4 Address Block Assignment	IPv6 Subnet Size	IPv6 Address Block Assignment
Router to Router interconnect	2				
Server Network	35				
Science Building	100				
Library	200				
Literature Building	60				
Administration Building	40				
Wireless Network	200				
Totals					

Note the number of devices in the Literature Building and the number of devices on the Wireless Network. What do you think would be the ideal subnet size for those, and why?

Once the table is completed, write down the:

- Minimum size of IPv4 address block required for the campus
- Minimum size of IPv6 address block required for the campus

From:

<https://workshops.nsrc.org/dokuwiki/> - **Workshops**

Permanent link:

<https://workshops.nsrc.org/dokuwiki/2016/uni-of-guam/ip-addressing>

Last update: **2016/07/26 00:28**