Network Essentials - Chapter 9 Review

Name : _____

1. Given a IP address 192.168.2.1/26, determine:

Network address : 192.168.2..0

a. Number of subnets : (n=26-24=2) = 2 to power of n = $2^2 = 4$
b. Number of hosts (H = 8-n = 6) = $2^H - 2 = 2^6 - 2 = 64-2 = 62$
c. Host range address : 192.168.2.1 - 192.168.2.62
d. broadcast address : 192.168.2.63 (1 more than the last host address)

2. The purpose of subnetting is to control and reduce traffic, and improve network performance.

3. A router is necessary for devices on different networks to communicate. It is usually used as a gateway to a LAN.

4. Traditional subnetting creates equal sized subnets. Addresses that are not used become wasted resources.

5. VLSM stands for Variable Length Subnet Masks.

6. VLSM provides more efficient use of addresses. It allows a network space to have unequal number of hosts.

7. Fill in the blanks