***Subnetting Class C Networks Based on Network Requirements***

You have been allocated 192.168.5.0/24 by Petropolis network architects. Break into subnetworks to address each store in this region.

When you have 5 stores in this region, we are going to break up this network into 5.

1. Convert the number of networks to binary.
   1. 101 = 5
2. Reserve bits in the mask and find your increment.
   1. 11111111.11111111.11111111.11100000
3. Use increment to generate network ranges.
   1. 100000 = 32
      1. 192.168.5.0
      2. 192.168.5.32
      3. 192.168.5.64
      4. 192.168.5.96
      5. 192.168.5.128

Which of the follow is a default class subnet?

1. /8
2. /16
3. /24

***Subnetting Class B Networks Based on Network Requirements***

If we design a 172.16.0.0 network for the allocation of 30 networks, which of the following subnet mask will help us achieve that goal?

30 = 00011110

So 11111111.11111111.11111000.00000000

Then 255.255.248.0

Because you find the first bit and flip the rest

**Subnetting Class A Networks Based on Network Requirements**

**Same as b**

***Troublesome Networks***

The reason for this is because when we start counting 0 is where you start counting.

Which of the following network mask increment could cause an incorrect calculation if you're not careful? (Choose two)

64, 8