

ITEC350 - Homework 1

Question 1

Radford Corporation has the following class C Internet License:

193.45.1.0

Radford Corp. would like to allow for at least 9 sub-networks using classful subnetting.

How should Radford Corp. divide up the bits in their Class C license to allow for this?

How many devices on each subnet would this allow?

What would their subnet mask be?

What would be the IP address (Subnet ID) of the first subnet?

What would be the IP address of the first machine on the first subnet?

What would be the IP address of the last machine on the first subnet?

What would be the broadcast address of the first subnet?

What would be the IP address (Subnet ID) of the second subnet?

What would be the IP address of the first machine on the second subnet?

What would be the IP address of the last machine on the second subnet?

What is the broadcast address of the second subnet?

What would be the IP address (Subnet ID) of the last subnet?

What would be the IP address of the first machine on the last subnet?

What would be the IP address of the last machine on the last subnet?

What is the broadcast address of the last subnet?

Question 2

RU Corporation has the following class B licence:

132.45.0.0.

RU would like to classfully divide this into exactly 62 (sub-) networks.

How should RU Corp. divide up the bits in their Class B license to allow for this?

How many devices on each subnet would this allow?

What would their subnet mask be?

What would be the IP address (Subnet ID) of the first subnet?

What would be the IP address of the first machine on the first subnet?

What would be the IP address of the last machine on the first subnet?

What would be the broadcast address of the first subnet?

What would be the IP address (Subnet ID) of the second subnet?

What would be the IP address of the first machine on the second subnet?

What would be the IP address of the last machine on the second subnet?
What is the broadcast address of the second subnet?
What would be the IP address (Subnet ID) of the last subnet?
What would be the IP address of the first machine on the last subnet?
What would be the IP address of the last machine on the last subnet?
What is the broadcast address of the last subnet?