# IPv4 Assignment 2

### Given – 195.75.75.242 /30

1. Convert all four octets from decimal to binary. (4 marks)  
     
   11000011.01001011.01001011.11110010
2. Write the mask in dotted decimal format. (2 marks)  
   255.255.255.252
3. What is the network address? (3 marks)  
   195.75.75.240/30
4. How many host bits are there? (1 mark)

2 

1. How many total addresses are there? (2 marks)  
     
   4
2. How many host addresses are created? (2 marks)  
     
   2
3. What is the range of host addresses? (3 marks)  
     
   195.75.75.241-242
4. What is the broadcast address for this network? (2 marks)  
     
   195.75.75.243  
     
     
   Total for this page \_\_\_\_\_\_\_\_

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### Given – 172.16.85.244 /23

1. Convert the four octets from decimal to binary. (4 marks)  
   10110000.00010000.01010101.11110100
2. Write the mask in dotted decimal format. (2 marks)  
     
   255.255.254.0
3. What is the network address? (3 marks)  
     
   176.16.84.0
4. How many host bits are there? (1 mark)

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1. How many total addresses are there? (2 marks)  
     
   512
2. How many host addresses are created? (2 marks)  
     
   510
3. What is the range of host addresses? (3 marks)  
     
   176.16.84.1-85.254
4. What is the broadcast address for this network? (2 marks)  
     
   176.16.85.255

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