## IP Addressing \#9

Given the IP address 101.0.0.0 calculate the following information

1. What class address is this? $\qquad$
Assuming 19 bits are borrowed to create subnets, answer the following questions.
2. What is the subnet mask? $\qquad$
3. How many usable subnets are created? $\qquad$
4. How many usable host on each subnet? $\qquad$
5. How many total usable host are created? $\qquad$
6. How many usable host addresses are lost due to subnetting? $\qquad$
Complete the chart below (borrowing 19 bits)

|  |  | Host Range |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Subnet <br> $\#$ | Subnet Address | Host From | Host To | Broadcast <br> Address |
| 0 | 101.0 .0 .0 |  |  |  |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |
| 4 |  |  |  |  |
| 5 |  |  |  |  |
| 6 |  |  |  |  |
| 7 |  |  |  |  |
| 8 |  |  |  |  |
| 9 |  |  |  |  |
| 10 |  |  |  |  |

## Challenge Problems

11. What is the Subnet Address of subnet 51? $\qquad$
12. What is the Subnet Address of subnet 80 ? $\qquad$
13. What is the Subnet Address of subnet 2050? $\qquad$
