Practice Problems

1. An organization is granted the block 198.27.60.0/24. The administrator wants to create 16 subnets. Find the subnet mask; the number of addresses in each subnet; the first and last addresses in subnet 1; the first and last addresses in subnet 16.
2. An ISP is granted a block of addresses starting with 150.80.128.0/16. The ISP wants to distribute these blocks to 400 customers and each of them needs 16 addresses. Design the sub-blocks and give the slash notation for each sub-block. Find out how many addresses are still available after these allocations.
3. A block of addresses is granted to a small organization. We know that one of the addresses is 200.17.21.140/27. Find the first address; the last address; the number of addresses.
4. A block of addresses is granted to a small organization. We know that one of the addresses is 205.16.37.39/28. Find the first address; the last address; the number of addresses
5. An organization is granted the block 211.17.180.0/24. The administrator wants to create 32 subnets. Find the subnet mask; the number of addresses in each subnet; the first and last addresses in subnet 1; the first and last addresses in subnet 32.
6. An ISP is granted a block of addresses starting with 150.80.0.0/16. The ISP wants to distribute these blocks to 200 customers and each of them needs 128 addresses. Design the subblocks and give the slash notation for each subblock. Find out how many addresses are still available after these allocations.