Subnetting Speed Kit — Set 5

Target time: **20 minutes** (under 1 minute per question). No calculator. Show your working. VLSM-heavy, plus mixed ranges.

Name:	Date:	Time taken:	Score: / 20

1. **How many usable hosts in a /20?**
   Write: Number of hosts
   Usable hosts: _____

2. **Which network is 198.51.100.187/25 in?**
   Write: Network address
   Network: _____

3. **Which network is 192.168.110.228/19 in?**
   Write: Network address
   Network: _____

4. **Which network is 10.249.218.11/21 in?**
   Write: Network address
   Network: _____

5. **10.247.34.191/22: find the network, broadcast and usable range.**
   Write: Network, broadcast and usable range
   Network: _____ Broadcast: _____
   Usable range: _____

6. **Which network is 192.168.223.49/26 in?**
   Write: Network address
   Network: _____

7. **10.186.52.83/29: find the network, broadcast and usable range.**
   Write: Network, broadcast and usable range
   Network: _____ Broadcast: _____
   Usable range: _____

8. **Last usable host in the subnet of 10.118.209.113/25?**
   Write: Last usable host
   Last usable: _____

9. **192.168.123.237/22: find the network, broadcast and usable range.**
   Write: Network, broadcast and usable range
   Network: _____ Broadcast: _____
   Usable range: _____

10. **Smallest prefix that fits 500 hosts?**
    Write: Prefix (or mask)
    Prefix: _____

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11. **172.22.6.226/30: find the network, broadcast and usable range.**
    Write: Network, broadcast and usable range
    Network: _____ Broadcast: _____
    Usable range: _____

12. **Broadcast address for 192.168.89.89/20?**
    Write: Broadcast address
    Broadcast: _____

13. **Smallest prefix that fits 50 hosts?**
    Write: Prefix (or mask)
    Prefix: _____

14. **VLSM: split 192.168.13.0/24 for 11, 2, 27 hosts, largest first. Which subnet does the 11-host LAN get?**
    Write: Network with prefix (e.g. 10.0.0.64/27)
    Subnet: _____

15. **VLSM: split 172.31.186.0/23 for 37, 166, 6, 2 hosts, largest first. Which subnet does the 2-host LAN get?**
    Write: Network with prefix (e.g. 10.0.0.64/27)
    Subnet: _____

16. **VLSM: split 192.168.116.0/22 for 21, 105, 43 hosts, largest first. Which subnet does the 43-host LAN get?**
    Write: Network with prefix (e.g. 10.0.0.64/27)
    Subnet: _____

17. **VLSM: 10.150.200.0/24 already has 10.150.200.0/26, 10.150.200.64/27. Next subnet for 4 hosts?**
    Write: Network with prefix
    Subnet: _____

18. **VLSM: 172.23.236.0/22 already has 172.23.236.0/23, 172.23.238.0/25, 172.23.238.128/28. Next subnet for 5 hosts?**
    Write: Network with prefix
    Subnet: _____

19. **VLSM: 172.27.81.0/24 already has 172.27.81.0/28, 172.27.81.16/29, 172.27.81.24/30. Does a subnet for 20 hosts still fit?**
    Write: Tick one
    ☐ Yes, it fits ☐ No, it doesn't fit

20. **VLSM: 10.64.167.0/24 already has 10.64.167.0/25, 10.64.167.128/26, 10.64.167.192/28. Does a subnet for 40 hosts still fit?**
    Write: Tick one
    ☐ Yes, it fits ☐ No, it doesn't fit

Answers are in a separate file (set-5-answers.pdf) at subnetcalculator.dev/subnetting-speed-kit/

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