Subnetting Speed Kit — Set 3

Target time: **20 minutes** (under 1 minute per question). No calculator. Show your working. Adds /19 to /23: the 3rd octet does the work.

Name:	Date:	Time taken:	Score: / 20

1. **Which network is 192.168.178.9/20 in?**
   Write: Network address
   Network: _____

2. **Mask 255.255.252.0: which octet does the block size count in?**
   Write: Tick one
   ☐ 2nd octet ☐ 3rd octet ☐ 4th octet

3. **192.168.123.225/28: find the network, broadcast and usable range.**
   Write: Network, broadcast and usable range
   Network: _____ Broadcast: _____
   Usable range: _____

4. **Which network is 10.46.106.77/20 in?**
   Write: Network address
   Network: _____

5. **Broadcast address for 10.132.78.241/19?**
   Write: Broadcast address
   Broadcast: _____

6. **Block size (magic number) for /22?**
   Write: Block size
   Block size: _____

7. **Smallest prefix that fits 400 hosts?**
   Write: Prefix (or mask)
   Prefix: _____

8. **Which network is 10.217.218.18/26 in?**
   Write: Network address
   Network: _____

9. **Subnet mask for /21?**
   Write: Dotted-decimal mask
   Mask: _____

10. **10.37.148.50/28: find the network, broadcast and usable range.**
    Write: Network, broadcast and usable range
    Network: _____ Broadcast: _____
    Usable range: _____

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11. **How many usable hosts in a /23?**
    Write: Number of hosts
    Usable hosts: _____

12. **Which network is 172.25.12.249/23 in?**
    Write: Network address
    Network: _____

13. **Smallest prefix that fits 1,000 hosts?**
    Write: Prefix (or mask)
    Prefix: _____

14. **Broadcast address for 172.18.99.153/19?**
    Write: Broadcast address
    Broadcast: _____

15. **How many usable hosts in a /22?**
    Write: Number of hosts
    Usable hosts: _____

16. **192.168.128.82/21: find the network, broadcast and usable range.**
    Write: Network, broadcast and usable range
    Network: _____ Broadcast: _____
    Usable range: _____

17. **192.168.8.226/20: find the network, broadcast and usable range.**
    Write: Network, broadcast and usable range
    Network: _____ Broadcast: _____
    Usable range: _____

18. **Block size (magic number) for /21?**
    Write: Block size
    Block size: _____

19. **Prefix length for mask 255.255.254.0?**
    Write: Prefix (e.g. /26)
    Prefix: _____

20. **VLSM: split 172.24.118.0/23 for 145, 59, 2 hosts, largest first. Which subnet does the 59-host LAN get?**
    Write: Network with prefix (e.g. 10.0.0.64/27)
    Subnet: _____

Answers are in a separate file (set-3-answers.pdf) at subnetcalculator.dev/subnetting-speed-kit/

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