CompTIA Network+ (N10-009) Commands Sheet

Practical command list grouped by connectivity, switching, routing, and packet diagnostics.

Best for	Focus	Use with
Command recall before labs and PBQs	What each command does and when to use it	Use with ports sheet and cheat sheet

1. Basic connectivity

ipconfig /all	View Windows IP settings, gateway, DNS, lease info.
ping	Test reachability and basic latency.
tracert / traceroute	Show the hop path toward a destination.
arp -a	View local ARP cache mappings.
nslookup	Query DNS records and test resolution.

2. Interface and route checks

netstat -ano	Show connections, listeners, and process IDs.
route print	Inspect the Windows routing table.
ip route	Show routes on Linux/network devices.
show ip interface brief	Quick Cisco interface status check.
show mac address-table	Verify switch MAC learning.

3. Switching and VLAN

show vlan brief	List VLAN IDs and member ports.
show interfaces trunk	Verify trunk state and allowed VLANs.
show spanning-tree	Check root bridge, role, and port state.
show etherchannel summary	Validate LACP/EtherChannel bundles.
show port-security	Review secure MAC settings and violations.

4. Routing and services

show ip route	Inspect connected, static, and dynamic routes.
show running-config	Review current device configuration.
show cdp neighbors	Discover adjacent Cisco devices.
show lldp neighbors	Vendor-neutral neighbor discovery.

show access-lists	Verify ACL entries and hit counts.

5. Capture and diagnostics

tcpdump -i eth0	Capture packets on a Linux interface.
Wireshark filters	Use protocol/address filters to isolate traffic.
dig	Flexible DNS lookup on Unix-like systems.
iperf3	Measure throughput between two hosts.
mtr	Combined ping + traceroute style path diagnostics.