

NAME: _____ DATE: _____

**Northampton Community College
CISC267 – CCNA 2 - Chapter 8 Study Guide**

1. Why would you use the debug command?
2. Explain the packet forwarding process performed by a router.
3. What is meant by a “parent” router? A “child” route? An “ultimate” network route?
4. What is *ip classless*? Does a router handle packets differently?

<pre>B# show ip route <- output omitted -> 10.0.0.0/27 is subnetted, 2 subnets R 10.16.1.0 [120/1] via 192.168.1.1, 00:00:06, Serial0/0/0 R 10.16.1.64 [120/1] via 192.168.1.6, 00:00:25, Serial0/0/1 <- output omitted -> S* 0.0.0.0/0 is directly connected, Serial0/0/0 B#</pre>	<pre>B# show running-config <- output omitted -> Router rip version 2 network 192.168.1.0 no auto-summary ! ip classless <- output omitted -></pre>
---	---

5. If router B receives a packet destined for 10.16.1.131, what will it do?
6. A network is converged and the routing tables are complete. When a packet needs to be forwarded, what is the first criterion used to determine the best path in the routing table?
7. By looking at a routing table, how would you distinguish between routes learned from RIPv1 and RIPv2?
9. What criteria is used by a router to choose a path to the same destination learned from different routing protocols?