Routing information protocol (RIPv1)

1. RIPv1 is a Distance-Vector Routing protocol.
2. RIPv1 is a Classful routing protocol. Classful routing protocols support only the networks which are not sub netted. Classful routing protocols do not send subnet mask information with their routing updates. In other words, if you have a subnetted network in your RIPv1 routing domain, RIPv1 will announce that network to other as unsubnetted network.
3. RIPv1 does not support VLSM (Variable Length Subnet Masking).
4. RIPv1 support maximum metric (hop count) value of 15. Any router farther than 15 hops away is considered as unreachable.

Routing information protocol (RIPv2)

1. RIPv2 is a Hybrid Routing Protocol. A Hybrid Routing Protocol is basically a Distance-Vector protocol which some characteristics of Link State routing protocols.
2. RIPv2 is classless routing, which allows us to use sub netted networks also. RIPv2 has the option for sending network mask in the update to allow classless routing.
3. RIPv2 support VLSM (Variable Length Subnet Masking).
4. RIPv2 support maximum metric (hop count) value of 15. Any router farther than 15 hops away is considered as unreachable.