Assignment 3: R2

Group 1:

All 5 of the trace files in group 1 had 3 probes for TTL's between 1 and 17. Traces 1 and 5 had 1 probe for TTL 18. Trace 1 had 1 probe, 19 probes, and 20 probes, at TTL's 40, 53, and 64 respectively. Traces 2 and 3 had 18 probes at TTL's 53 and 64. Trace 4 had 17 probes at TTL's 53 and 64. Trace 5 had 16 probes at TTL's 53 and 64.

The router sequence is the same from routers 1 to 11, then are slightly different after that. This is likely due to load balancing done between the routers, depending on which routers are busy at the time of the traceroute.

Group 2:

All 5 of the trace files in group 2 had 3 probes for TTL's between 1 and 9.

As the traceroutes had the same sequence of intermediate routers, here is the table of their average RTT's.

TTL (hops)	Trace 1 RTT	Trace 2 RTT	Trace 3 RTT	Trace 4 RTT	Trace 5 RTT
1	3.3	2.7	7.9	3.4	1.8
2	15.8	17.1	11.8	13.2	16.2
3	18.9	20.1	22.6	21.7	21.6
4	22.9	19.5	19.5	19.7	18.6
5	26.5	21.6	20.3	35.8	20.7
6	24.3	20.0	21.8	22.7	43.5
7	18.4	51.7	22.8	18.4	26.9
8	23.0	108.8	20.6	24.6	25.6

I would suggest that there is a misleading outlier that will not occur most of the time, namely the 108.8 in Trace 2. If we are to assume that this RTT is unlikely to occur regularly, I would say that TTL 5 is likely to incur the maximum delay. However, if we are

to take all values at face value and assume there are no irregular outliers, I would say that TTL 8 incurs the maximum delay.