Exemplar for internal assessment resource Mathematics and Statistics for Achievement Standard 91260

Student 5: Low Achieved

(2)

NZQA Intended for teacher use only

Taupo Club:

The shortest route is Hamilton – TeAwamutu – Tokoroa – Taupo = 29 + 70 + 66 = 165km

Hamilton Club: The minimum cost is \$6 230 000. (1)

This uses the roads Hamilton to Cambridge (460) Cambridge to Matamata (820) Matamata to Tirau (630) Cambridge to Te Awamutu (480) TeAwamutu to Pirongia (360) TeAwamutu to Te Kuiti (1440) Te Awamutu to Tokoroa (1050) Tokoroa to Taupo (990)

Tirau Club: the maximum scenic value is 64. The roads I used are on this diagram



Tokoroa club

Because Matamata and TeKuiti are odd and the rest even the network is not traversable starting and finishing at the same place. But it could be traversed and finished at the 2 odd nodes, so starting at Matamata and finishing at TeKuiti or the other way round.