Appendix A

Equation (1) for the locomotive network reads:

\[
\bar{Q} = \arg\max H(Q) = -\sum_v Q(v) \log_2 Q(v)
\]

\[
s.t. \quad Q(V_1 = 0 \mid V_4 = 1) = Q(V_2 = 0 \mid V_4 = 1) = \\
Q(V_3 = 0 \mid V_4 = 1) = Q(V_5 = 0 \mid V_4 = 1) = \\
Q(V_2 = 0 \mid V_1 = 1) = Q(V_3 = 0 \mid V_1 = 1) = \\
Q(V_3 = 0 \mid V_2 = 1) = Q(V_6 = 0 \mid V_3 = 1) = \\
Q(V_7 = 0 \mid V_6 = 1) = Q(V_8 = 0 \mid V_6 = 1) = 1.
\]
Appendix B

Equation (2) for the locomotive network reads:

$$\overline{Q}^{(4)} = \arg \max H(Q) = -\sum_v Q(v) \log_2 Q(v)$$

s.t. same restrictions as in Appendix A plus

$$Q(V_4 = 1) = 1.$$