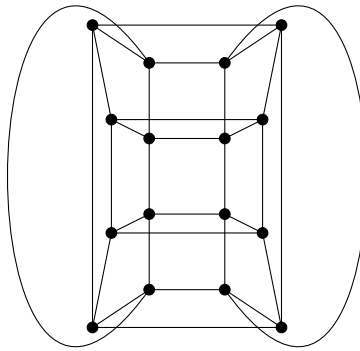


1.3.3

Let u and v be adjacent vertices in G . Prove that uv belongs to at least $d(u) + d(v) - n(G)$ triangles in G .

1.3.4

Prove that the graph below is isomorphic to Q_4 .



1.3.6

Given graphs G and H , determine the number of components and maximum degree in $G+H$ in terms of the parameters for G and H .

1.3.7

Determine the maximum number of edges in a bipartite subgraph of P_n , C_n , and K_n .

1.3.26 (a)

Count the 6-cycles in Q_3 .