

*****COMPLETE GRAPH-7*****

Edges of COMPLETE GRAPH-7:

(4, 5) (1, 6) (1, 4) (1, 7) (1, 2) (1, 5) (4, 6)
(2, 3) (2, 4) (2, 6) (2, 7) (3, 5) (3, 4) (3, 6)
(1, 3) (3, 7) (4, 7) (5, 6) (2, 5) (5, 7) (6, 7)

VERTICES = 7 EDGES = 21

Chromatic polynomial of COMPLETE GRAPH-7:

$$\begin{aligned} P(G, x) = & \quad 1 x*(x-1)^6 \\ & -15 x*(x-1)^5 \\ & \quad 85 x*(x-1)^4 \\ & -225 x*(x-1)^3 \\ & \quad 274 x*(x-1)^2 \\ & -120 x*(x-1)^1 \end{aligned}$$