

Edges of 9-CAGE-14:

(1 9) (4 5) (32 56) (46 47) (6 7) (41 42)
 (34 35) (18 34) (4 50) (23 31) (1 2) (43 44)
 (29 30) (49 50) (26 54) (31 32) (3 41) (48 49)
 (32 33) (58 1) (2 27) (13 29) (38 39) (30 31)
 (56 57) (45 46) (7 8) (37 45) (40 41) (44 57)
 (17 40) (10 52) (11 35) (23 24) (7 20) (35 36)
 (5 36) (21 43) (53 54) (3 4) (17 18) (24 25)
 (25 26) (21 22) (22 51) (42 43) (37 38) (39 40)
 (33 34) (12 13) (10 11) (11 12) (33 48) (50 51)
 (19 28) (13 14) (39 53) (2 3) (55 56) (27 28)
 (22 23) (14 49) (8 9) (51 52) (20 21) (44 45)
 (54 55) (30 38) (5 6) (26 27) (19 20) (12 42)
 (57 58) (14 15) (16 24) (25 46) (52 53) (9 10)
 (15 58) (16 17) (8 47) (47 48) (15 16) (36 37)
 (18 19) (28 29) (6 55)

Chromatic polynomial relative the tree basis:

$$\begin{aligned}
 P(9 - CAGE - 14, x) = & \\
 & +1x * (x - 1)^{57} \\
 & -30x * (x - 1)^{56} \\
 & +465x * (x - 1)^{55} \\
 & -4960x * (x - 1)^{54} \\
 & +40920x * (x - 1)^{53} \\
 & -278256x * (x - 1)^{52} \\
 & +1623160x * (x - 1)^{51} \\
 & -8347680x * (x - 1)^{50} \\
 & +38607924x * (x - 1)^{49} \\
 & -163008667x * (x - 1)^{48} \\
 & +635697888x * (x - 1)^{47} \\
 & -2311279518x * (x - 1)^{46} \\
 & +7894223761x * (x - 1)^{45} \\
 & -25487744550x * (x - 1)^{44} \\
 & +78193199139x * (x - 1)^{43} \\
 & -228930459775x * (x - 1)^{42} \\
 & +641969127432x * (x - 1)^{41} \\
 & -1729528337014x * (x - 1)^{40} \\
 & +4488056314486x * (x - 1)^{39} \\
 & -11241848457180x * (x - 1)^{38} \\
 & +27229489930911x * (x - 1)^{37} \\
 & -63870192301109x * (x - 1)^{36} \\
 & +145252932398235x * (x - 1)^{35} \\
 & -320567392242094x * (x - 1)^{34} \\
 & +687036612432473x * (x - 1)^{33} \\
 & -1430576848003794x * (x - 1)^{32} \\
 & +2894878155601690x * (x - 1)^{31} \\
 & -5693391483965215x * (x - 1)^{30} \\
 & +10881465821963646x * (x - 1)^{29} \\
 & -20204835868112456x * (x - 1)^{28} \\
 & +36431214312218447x * (x - 1)^{27} \\
 & -63747580045449739x * (x - 1)^{26} \\
 & +108160282340566317x * (x - 1)^{25} \\
 & -177765081221181377x * (x - 1)^{24} \\
 & +282666301477109502x * (x - 1)^{23} \\
 & -434243193847577722x * (x - 1)^{22} \\
 & +643437218484579938x * (x - 1)^{21} \\
 & -917839141875143484x * (x - 1)^{20} \\
 & +1257664534131339799x * (x - 1)^{19} \\
 & -1651250330672883873x * (x - 1)^{18} \\
 & +2071399991610790134x * (x - 1)^{17} \\
 & -2474493922024873261x * (x - 1)^{16} \\
 & +2804343683058146902x * (x - 1)^{15} \\
 & -3001859009596573462x * (x - 1)^{14} \\
 & +3019546424547471258x * (x - 1)^{13} \\
 & -2837124777030791568x * (x - 1)^{12} \\
 & +2472361725524213669x * (x - 1)^{11} \\
 & -1981254535440069415x * (x - 1)^{10} \\
 & +1444973736598107537x * (x - 1)^9 \\
 & -946873131956811032x * (x - 1)^8 \\
 & +548478632282862132x * (x - 1)^7 \\
 & -274923092711265239x * (x - 1)^6 \\
 & +115835573026321649x * (x - 1)^5 \\
 & -39342852377632207x * (x - 1)^4 \\
 & +10085300292622518x * (x - 1)^3 \\
 & -1731634780940232x * (x - 1)^2 \\
 & +149056156222976x * (x - 1)^1
 \end{aligned}$$

Chromatic polynomial relative the standard basis:

$$\begin{aligned}
P(9 - Cage - 14, x) = & \\
& -29660349507287469818x \\
& +418427578774199798293x^2 \\
& -2971128851545069032836x^3 \\
& +14171829502480639567316x^4 \\
& -51116678513553281479052x^5 \\
& +148774402342744820142438x^6 \\
& -364021518512190836368853x^7 \\
& +770174594300142018156299x^8 \\
& -1438117301101545746577960x^9 \\
& +2406817589834033814480613x^{10} \\
& -3653711566098644022444191x^{11} \\
& +5079049802198115146645183x^{12} \\
& -6514671043327399481304876x^{13} \\
& +7757915886624185889987717x^{14} \\
& -8620423978911176643318191x^{15} \\
& +8975014264943136711128798x^{16} \\
& -8784799679774703038310671x^{17} \\
& +8106178243982430604026131x^{18} \\
& -7067379268612769212367680x^{19} \\
& +5832249233539424310314953x^{20} \\
& -4562061698687027018752996x^{21} \\
& +3386120942181461049579387x^{22} \\
& -2386733930810794774317458x^{23} \\
& +1598453532475046727417473x^{24} \\
& -1017483425440484666578276x^{25} \\
& +615652378395794157394589x^{26} \\
& -354074866703285540077261x^{27} \\
& +193510109748371889879219x^{28} \\
& -100459512380539426326935x^{29} \\
& +49513395702567227344740x^{30} \\
& -23152700842536785531597x^{31} \\
& +10262885343361316881798x^{32} \\
& -4308298767308015987376x^{33} \\
& +1710908238065828535311x^{34} \\
& -641921080610285272672x^{35} \\
& +227221277530609221969x^{36} \\
& -75758296765733700428x^{37} \\
& +23748810315568063111x^{38} \\
& -6985634887829399589x^{39} \\
& +1923698816618061655x^{40} \\
& -494683691261914702x^{41} \\
& +118447925863642893x^{42} \\
& -26322073359224334x^{43} \\
& +5408678897373891x^{44} \\
& -1023266714869071x^{45} \\
& +177366478114863x^{46} \\
& -28005249439536x^{47} \\
& +4000750742118x^{48} \\
& -512916792993x^{49} \\
& +58433559474x^{50} \\
& -5843355957x^{51} \\
& +504981379x^{52} \\
& -36949857x^{53} \\
& +2225895x^{54} \\
& -105995x^{55} \\
& +3741x^{56} \\
& -87x^{57} \\
& +1x^{58}
\end{aligned}$$

Roots of the chromatic polynomial of 9-CAGE-14:

$x- > 0.$	$x- > 1.63259 + 1.68906I$
$x- > 1.$	$x- > 1.78095 - 1.61597I$
$x- > 2.$	$x- > 1.78095 + 1.61597I$
$x- > 2.68442$	$x- > 1.92423 - 1.53146I$
$x- > -0.667437 - 1.15099I$	$x- > 1.92423 + 1.53146I$
$x- > -0.667437 + 1.15099I$	$x- > 2.053 - 1.44404I$
$x- > -0.412171 - 1.38985I$	$x- > 2.053 + 1.44404I$
$x- > -0.412171 + 1.38985I$	$x- > 2.16925 - 1.35643I$
$x- > -0.179957 - 1.53862I$	$x- > 2.16925 + 1.35643I$
$x- > -0.179957 + 1.53862I$	$x- > 2.2602 - 1.27619I$
$x- > 0.0378026 - 1.64594I$	$x- > 2.2602 + 1.27619I$
$x- > 0.0378026 + 1.64594I$	$x- > 2.32297 - 1.16519I$
$x- > 0.245568 - 1.73479I$	$x- > 2.32297 + 1.16519I$
$x- > 0.245568 + 1.73479I$	$x- > 2.39263 - 1.03479I$
$x- > 0.447934 - 1.81263I$	$x- > 2.39263 + 1.03479I$
$x- > 0.447934 + 1.81263I$	$x- > 2.46274 - 0.899096I$
$x- > 0.644982 - 1.87484I$	$x- > 2.46274 + 0.899096I$
$x- > 0.644982 + 1.87484I$	$x- > 2.5271 - 0.761296I$
$x- > 0.825554 - 1.89386I$	$x- > 2.5271 + 0.761296I$
$x- > 0.825554 + 1.89386I$	$x- > 2.58348 - 0.626312I$
$x- > 0.995549 - 1.87957I$	$x- > 2.58348 + 0.626312I$
$x- > 0.995549 + 1.87957I$	$x- > 2.62856 - 0.495837I$
$x- > 1.16377 - 1.85034I$	$x- > 2.62856 + 0.495837I$
$x- > 1.16377 + 1.85034I$	$x- > 2.6584 - 0.367979I$
$x- > 1.32226 - 1.80576I$	$x- > 2.6584 + 0.367979I$
$x- > 1.32226 + 1.80576I$	$x- > 2.67566 - 0.242346I$
$x- > 1.47931 - 1.75152I$	$x- > 2.67566 + 0.242346I$
$x- > 1.47931 + 1.75152I$	$x- > 2.68287 - 0.120398I$
$x- > 1.63259 - 1.68906I$	$x- > 2.68287 + 0.120398I$