

Edges of 9-CAGE-11:

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

Chromatic polynomial relative the tree basis:

$$\begin{aligned}
 P(9 - CAGE - 11, 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} \\
 & +38607945x * (x - 1)^{49} \\
 & -163009260x * (x - 1)^{48} \\
 & +635706528x * (x - 1)^{47} \\
 & -2311366055x * (x - 1)^{46} \\
 & +7894893403x * (x - 1)^{45} \\
 & -25492010253x * (x - 1)^{44} \\
 & +78216473799x * (x - 1)^{43} \\
 & -229042213839x * (x - 1)^{42} \\
 & +642450630966x * (x - 1)^{41} \\
 & -1731417428040x * (x - 1)^{40} \\
 & +4494881994328x * (x - 1)^{39} \\
 & -11264766247450x * (x - 1)^{38} \\
 & +27301511832655x * (x - 1)^{37} \\
 & -64083284952536x * (x - 1)^{36} \\
 & +145849379699894x * (x - 1)^{35} \\
 & -322152992045630x * (x - 1)^{34} \\
 & +691053115104452x * (x - 1)^{33} \\
 & -1440297547672643x * (x - 1)^{32} \\
 & +2917404424404893x * (x - 1)^{31} \\
 & -5743462383312304x * (x - 1)^{30} \\
 & +10988367780746180x * (x - 1)^{29} \\
 & -20424290507331532x * (x - 1)^{28} \\
 & +36864710271690897x * (x - 1)^{27} \\
 & -64571917887087443x * (x - 1)^{26} \\
 & +109669616641833542x * (x - 1)^{25} \\
 & -180425738134196003x * (x - 1)^{24} \\
 & +287180288032476074x * (x - 1)^{23} \\
 & -441609014516731161x * (x - 1)^{22} \\
 & +654986691135430278x * (x - 1)^{21} \\
 & -935218442495059654x * (x - 1)^{20} \\
 & +1282721307333800993x * (x - 1)^{19} \\
 & -1685793477822723262x * (x - 1)^{18} \\
 & +2116822476939599737x * (x - 1)^{17} \\
 & -2531295800042554936x * (x - 1)^{16} \\
 & +2871656793114235560x * (x - 1)^{15} \\
 & -3077135187756843877x * (x - 1)^{14} \\
 & +3098591719715202221x * (x - 1)^{13} \\
 & -2914605273591884676x * (x - 1)^{12} \\
 & +2542758241092557728x * (x - 1)^{11} \\
 & -2040040895674923830x * (x - 1)^{10} \\
 & +1489630651777961865x * (x - 1)^9 \\
 & -977340166848148653x * (x - 1)^8 \\
 & +566845895191897515x * (x - 1)^7 \\
 & -284501498898092709x * (x - 1)^6 \\
 & +120032935796755476x * (x - 1)^5 \\
 & -40825017748325518x * (x - 1)^4 \\
 & +10480145249692009x * (x - 1)^3 \\
 & -1802047655672646x * (x - 1)^2 \\
 & +155346363571352x * (x - 1)^1
 \end{aligned}$$

Chromatic polynomial relative the standard basis:

$$\begin{aligned}
P(9 - Cage - 11, x) = & \\
& -30406344037976929672x \\
& +428452222823893290698x^2 \\
& -3038794241473626767517x^3 \\
& +14477962273093086487115x^4 \\
& -52161461437712598538047x^5 \\
& +151643703431336294251650x^6 \\
& -370625372493114738067371x^7 \\
& +783270215687490364238013x^8 \\
& -1460943082892920879970006x^9 \\
& +2442312362585757008187645x^{10} \\
& -3703519445441555112484381x^{11} \\
& +5142684560545154842910897x^{12} \\
& -6589214909518139807005318x^{13} \\
& +7838433404415251992376097x^{14} \\
& -8700977709911659517516421x^{15} \\
& +9049929040058953352177449x^{16} \\
& -8849751567814590065144136x^{17} \\
& +8158798765694717913134951x^{18} \\
& -7107285089188708691884624x^{19} \\
& +5860617158473104100095658x^{20} \\
& -4580983390028172747676181x^{21} \\
& +3397971025715064779728330x^{22} \\
& -2393704552483025533281769x^{23} \\
& +1602305229564172903646616x^{24} \\
& -1019482344056688439604863x^{25} \\
& +616626307526227863825651x^{26} \\
& -354520085375661815612243x^{27} \\
& +193700899754843787724236x^{28} \\
& -100536070730799612452197x^{29} \\
& +49542122968432777316491x^{30} \\
& -23162764494187648295725x^{31} \\
& +10266170424281948889033x^{32} \\
& -4309295771018295787026x^{33} \\
& +1711188834806472502714x^{34} \\
& -641994093497290237260x^{35} \\
& +227238781424327394950x^{36} \\
& -75762147360694087423x^{37} \\
& +23749583922726666613x^{38} \\
& -6985776040090108540x^{39} \\
& +1923722051841078617x^{40} \\
& -494687114430555936x^{41} \\
& +118448372850264117x^{42} \\
& -26322124465055981x^{43} \\
& +5408683935046731x^{44} \\
& -1023267134362563x^{45} \\
& +177366506810971x^{46} \\
& -28005250987961x^{47} \\
& +4000750803918x^{48} \\
& -512916794615x^{49} \\
& +58433559495x^{50} \\
& -5843355957x^{51} \\
& +504981379x^{52} \\
& -36949857x^{53} \\
& +2225895x^{54} \\
& -105995x^{55} \\
& +3741x^{56} \\
& -87x^{57} \\
& +1x^{58}
\end{aligned}$$

Roots of the chromatic polynomial of 9-CAGE-11:

$x- > 0.$	$x- > 1.64018 + 1.69121I$
$x- > 1.$	$x- > 1.78943 - 1.62063I$
$x- > 2.$	$x- > 1.78943 + 1.62063I$
$x- > 2.68297$	$x- > 1.92794 - 1.54232I$
$x- > -0.67466 - 1.1537I$	$x- > 1.92794 + 1.54232I$
$x- > -0.67466 + 1.1537I$	$x- > 2.0486 - 1.46204I$
$x- > -0.412077 - 1.3857I$	$x- > 2.0486 + 1.46204I$
$x- > -0.412077 + 1.3857I$	$x- > 2.15011 - 1.36908I$
$x- > -0.178468 - 1.53389I$	$x- > 2.15011 + 1.36908I$
$x- > -0.178468 + 1.53389I$	$x- > 2.24179 - 1.26235I$
$x- > 0.0383683 - 1.64686I$	$x- > 2.24179 + 1.26235I$
$x- > 0.0383683 + 1.64686I$	$x- > 2.3272 - 1.14706I$
$x- > 0.245508 - 1.74078I$	$x- > 2.3272 + 1.14706I$
$x- > 0.245508 + 1.74078I$	$x- > 2.40565 - 1.02421I$
$x- > 0.446782 - 1.81909I$	$x- > 2.40565 + 1.02421I$
$x- > 0.446782 + 1.81909I$	$x- > 2.47636 - 0.896318I$
$x- > 0.64251 - 1.87902I$	$x- > 2.47636 + 0.896318I$
$x- > 0.64251 + 1.87902I$	$x- > 2.53786 - 0.766218I$
$x- > 0.82104 - 1.89241I$	$x- > 2.53786 + 0.766218I$
$x- > 0.82104 + 1.89241I$	$x- > 2.58852 - 0.635161I$
$x- > 0.992724 - 1.87663I$	$x- > 2.58852 + 0.635161I$
$x- > 0.992724 + 1.87663I$	$x- > 2.62809 - 0.504364I$
$x- > 1.15904 - 1.84471I$	$x- > 2.62809 + 0.504364I$
$x- > 1.15904 + 1.84471I$	$x- > 2.6563 - 0.375034I$
$x- > 1.32266 - 1.80211I$	$x- > 2.6563 + 0.375034I$
$x- > 1.32266 + 1.80211I$	$x- > 2.67292 - 0.247965I$
$x- > 1.48346 - 1.75122I$	$x- > 2.67292 + 0.247965I$
$x- > 1.48346 + 1.75122I$	$x- > 2.68068 - 0.122888I$
$x- > 1.64018 - 1.69121I$	$x- > 2.68068 + 0.122888I$