

Table 6: The parent of some nodes $x \in V(CQ_6)$ in T_5 rooted at $r = 011011_2 = 27$.

$$N_5(27) = 111001_2 = 57$$

$$\overline{N}_5(27) = 011011_2 = 27$$

x	x'	$I_5(x)$	$I_5(x')$	$\alpha_5(x)$	$H_5(x)$	$j = \text{NEXT}(5, x)$	$\text{PARENT}(T_5, x)$
(0) 000000	000000	$\{\}$	$\{\}$	0	$\{0, 3, 4, 5\}$	5	$= N_5(0) = 100000$ (32)
(1) 000001	000011	$\{\}$	$\{\}$	0	$\{3, 4, 5\}$	5	$= N_5(1) = 100011$ (35)
(2) 000010	000010	$\{\}$	$\{\}$	0	$\{0, 1, 3, 4, 5\}$	5	$= N_5(2) = 100010$ (34)
(3) 000011	000001	$\{\}$	$\{\}$	0	$\{1, 3, 4, 5\}$	5	$= N_5(3) = 100001$ (33)
(4) 000100	001100	$\{\}$	$\{\}$	0	$\{0, 2, 3, 4, 5\}$	5	$= N_5(4) = 101100$ (44)
(5) 000101	001111	$\{\}$	$\{\}$	0	$\{2, 3, 4, 5\}$	5	$= N_5(5) = 101111$ (47)
(6) 000110	001110	$\{\}$	$\{\}$	0	$\{0, 1, 2, 3, 4, 5\}$	5	$= N_5(6) = 101110$ (46)
(7) 000111	001101	$\{\}$	$\{\}$	0	$\{1, 2, 3, 4, 5\}$	5	$= N_5(7) = 101101$ (45)
(8) 001000	001000	$\{\}$	$\{\}$	0	$\{0, 4, 5\}$	5	$= N_5(8) = 101000$ (40)
(9) 001001	001011	$\{\}$	$\{\}$	0	$\{4, 5\}$	5	$= N_5(9) = 101011$ (43)
(10) 001010	001010	$\{\}$	$\{\}$	0	$\{0, 1, 4, 5\}$	5	$= N_5(10) = 101010$ (42)
(11) 001011	001001	$\{\}$	$\{\}$	0	$\{1, 4, 5\}$	5	$= N_5(11) = 101001$ (41)
(12) 001100	000100	$\{\}$	$\{\}$	0	$\{0, 2, 4, 5\}$	5	$= N_5(12) = 100100$ (36)
(13) 001101	000111	$\{\}$	$\{\}$	0	$\{2, 4, 5\}$	5	$= N_5(13) = 100111$ (39)
(14) 001110	000110	$\{\}$	$\{\}$	0	$\{0, 1, 2, 4, 5\}$	5	$= N_5(14) = 100110$ (38)
(15) 001111	000101	$\{\}$	$\{\}$	0	$\{1, 2, 4, 5\}$	5	$= N_5(15) = 100101$ (37)
(16) 010000	110000	$\{\}$	$\{\}$	0	$\{0, 3, 5\}$	5	$= N_5(16) = 110000$ (48)
(17) 010001	110011	$\{\}$	$\{\}$	0	$\{3, 5\}$	5	$= N_5(17) = 110011$ (51)
(18) 010010	110010	$\{\}$	$\{\}$	0	$\{0, 1, 3, 5\}$	5	$= N_5(18) = 110010$ (50)
(19) 010011	110001	$\{\}$	$\{\}$	0	$\{1, 3, 5\}$	5	$= N_5(19) = 110001$ (49)
(20) 010100	111100	$\{\}$	$\{\}$	0	$\{0, 2, 3, 5\}$	5	$= N_5(20) = 111100$ (60)
(21) 010101	111111	$\{\}$	$\{\}$	0	$\{2, 3, 5\}$	5	$= N_5(21) = 111111$ (63)
(22) 010110	111110	$\{\}$	$\{\}$	0	$\{0, 1, 2, 3, 5\}$	5	$= N_5(22) = 111110$ (62)
(23) 010111	111101	$\{\}$	$\{\}$	0	$\{1, 2, 3, 5\}$	5	$= N_5(23) = 111101$ (61)
(24) 011000	111000	$\{\}$	$\{\}$	0	$\{0, 5\}$	5	$= N_5(24) = 111000$ (56)
(25) 011001	111011	$\{\}$	$\{\}$	0	$\{5\}$	5	$= N_5(25) = 111011$ (59)
(26) 011010	111010	$\{\}$	$\{\}$	0	$\{0, 1, 5\}$	5	$= N_5(26) = 111010$ (58)
(27) 011011	-	-	-	-	-	-	- (root)
(28) 011100	110100	$\{\}$	$\{\}$	0	$\{0, 2, 5\}$	5	$= N_5(28) = 110100$ (52)
(29) 011101	110111	$\{\}$	$\{\}$	0	$\{2, 5\}$	5	$= N_5(29) = 110111$ (55)
(30) 011110	110110	$\{\}$	$\{\}$	0	$\{0, 1, 2, 5\}$	5	$= N_5(30) = 110110$ (54)
(31) 011111	110101	$\{\}$	$\{\}$	0	$\{1, 2, 5\}$	5	$= N_5(31) = 110101$ (53)
(32) 100000	100000	$\{\}$	$\{\}$	0	$\{0, 3, 4\}$	4	$= N_4(32) = 110000$ (48)
(33) 100001	100011	$\{\}$	$\{\}$	0	$\{3, 4\}$	4	$= N_4(33) = 110011$ (51)
(34) 100010	100010	$\{\}$	$\{\}$	0	$\{0, 1, 3, 4\}$	4	$= N_4(34) = 110010$ (50)
(35) 100011	100001	$\{\}$	$\{\}$	0	$\{1, 3, 4\}$	4	$= N_4(35) = 110001$ (49)
(36) 100100	101100	$\{\}$	$\{\}$	0	$\{0, 2, 3, 4\}$	4	$= N_4(36) = 111100$ (60)
(37) 100101	101111	$\{\}$	$\{\}$	0	$\{2, 3, 4\}$	4	$= N_4(37) = 111111$ (63)
(38) 100110	101110	$\{\}$	$\{\}$	0	$\{0, 1, 2, 3, 4\}$	4	$= N_4(38) = 111110$ (62)
(39) 100111	101101	$\{\}$	$\{\}$	0	$\{1, 2, 3, 4\}$	4	$= N_4(39) = 111101$ (61)
(40) 101000	101000	$\{\}$	$\{\}$	0	$\{0, 4\}$	4	$= N_4(40) = 111000$ (56)
(41) 101001	101011	$\{\}$	$\{\}$	0	$\{4\}$	4	$= N_4(41) = 111011$ (59)
(42) 101010	101010	$\{\}$	$\{\}$	0	$\{0, 1, 4\}$	4	$= N_4(42) = 111010$ (58)
(43) 101011	101001	$\{\}$	$\{\}$	0	$\{1, 4\}$	4	$= N_4(43) = 111001$ (57)
(44) 101100	100100	$\{\}$	$\{\}$	0	$\{0, 2, 4\}$	4	$= N_4(44) = 110100$ (52)
(45) 101101	100111	$\{\}$	$\{\}$	0	$\{2, 4\}$	4	$= N_4(45) = 110111$ (55)
(46) 101110	100110	$\{\}$	$\{\}$	0	$\{0, 1, 2, 4\}$	4	$= N_4(46) = 110110$ (54)
(47) 101111	100101	$\{\}$	$\{\}$	0	$\{1, 2, 4\}$	4	$= N_4(47) = 110101$ (53)
(48) 110000	010000	$\{\}$	$\{\}$	0	$\{0, 3\}$	3	$= N_3(48) = 111000$ (56)
(49) 110001	010011	$\{\}$	$\{\}$	0	$\{3\}$	3	$= N_3(49) = 111011$ (59)
(50) 110010	010010	$\{\}$	$\{\}$	0	$\{0, 1, 3\}$	3	$= N_3(50) = 111010$ (58)
(51) 110011	010001	$\{\}$	$\{\}$	0	$\{1, 3\}$	3	$= N_3(51) = 111001$ (57)
(52) 110100	011100	$\{\}$	$\{\}$	0	$\{0, 2, 3\}$	3	$= N_3(52) = 111100$ (60)
(53) 110101	011111	$\{\}$	$\{\}$	0	$\{2, 3\}$	3	$= N_3(53) = 111111$ (63)
(54) 110110	011110	$\{\}$	$\{\}$	0	$\{0, 1, 2, 3\}$	3	$= N_3(54) = 111110$ (62)
(55) 110111	011101	$\{\}$	$\{\}$	0	$\{1, 2, 3\}$	3	$= N_3(55) = 111101$ (61)
(56) 111000	011000	$\{\}$	$\{\}$	0	$\{0\}$	0	$= N_0(56) = 111001$ (57)
(57) 111001	011011	$\{\}$	$\{\}$	0	$\{\}$	5	$= N_5(57) = 011011$ (27)
(58) 111010	011010	$\{\}$	$\{\}$	0	$\{0, 1\}$	1	$= N_1(58) = 111000$ (56)
(59) 111011	011001	$\{\}$	$\{\}$	0	$\{1\}$	1	$= N_1(59) = 111001$ (57)
(60) 111100	010100	$\{\}$	$\{\}$	0	$\{0, 2\}$	2	$= N_2(60) = 111000$ (56)
(61) 111101	010111	$\{\}$	$\{\}$	0	$\{2\}$	2	$= N_2(61) = 111011$ (59)
(62) 111110	010110	$\{\}$	$\{\}$	0	$\{0, 1, 2\}$	2	$= N_2(62) = 111010$ (58)
(63) 111111	010101	$\{\}$	$\{\}$	0	$\{1, 2\}$	2	$= N_2(63) = 111001$ (57)