Report

1. The Harmonia theorem represented in Lisp.

(defvar *harmonia*   '((1 ((Grandparent x y)) ((Parent x z) (Parent z y)))
                      (2 ((Parent x y)) ((Mother x y)))
                      (3 ((Parent x y)) ((Father x y)))
                      (4 ((Father (Zues) (Ares))) nil)
                      (5 ((Mother (Hera) (Ares))) nil)
                      (6 ((Father (Ares) (Harmonia))) nil)
                      (7 nil ((Grandparent x (Harmonia)))))) ;; goal clause begins here

2. Test results of two-pointer on the five theorems (howling hound, customs official, roadrunner, Harmonia, and healthy Kevin theorem).

Theorems	Number of resolution steps to get False
Howling	95
RR	516
customs	116
Harmonia	58
Healthy Kevin (custom)	17

3. Print out the full resolution steps in each case.

Howling:
1 + 3 = (9 nil ((hound 54) (ls 53) (have 53 54)))
1 + 5 = (10 ((howl (a)) (cat (a))) nil)
2 + 4 = (11 nil ((cat (a)) (have (john) 74) (mouse 74)))
2 + 4 = (12 nil ((have (john) 79) (cat 79) (mouse (a))))
2 + 5 = (13 ((hound (a))) ((have 90 (a)) (have 90 92) (mouse 92)))
2 + 6 = (14 nil ((have 117 118) (cat 118) (have 117 (b))))
2 + 8 = (15 nil ((cat (b)) (have (john) 134) (mouse 134)))
2 + 8 = (16 nil ((have (john) 139) (cat 139) (mouse (b))))
2 + 10 = (17 ((howl (a))) ((have 153 (a)) (have 153 155) (mouse 155)))
3 + 4 = (18 nil ((ls (john)) (howl (a))))
3 + 7 = (19 nil ((have (john) 233) (howl 233)))
3 + 8 = (20 nil ((ls (john)) (howl (b))))
3 + 10 = (21 ((cat (a))) ((ls 252) (have 252 (a))))
3 + 17 = (22 nil ((ls 276) (have 276 (a)) (have 278 (a)) (have 278 279) (mouse 279)))
4 + 9 = (23 nil ((hound (a)) (ls (john))))
4 + 11 = (24 nil ((cat (a)) (mouse (a))))
4 + 13 = (25 ((hound (a))) ((have (john) 302) (mouse 302)))
4 + 13 = (26 ((hound (a))) ((have (john) (a)) (mouse (a))))
4 + 14 = (27 nil ((cat (a)) (have (john) (b))))

4 + 15 = (28 nil ((cat (b)) (mouse (a))))
4 + 16 = (29 nil ((cat (a)) (mouse (b))))
4 + 17 = (30 ((howl (a))) ((have (john) 320) (mouse 320)))
4 + 17 = (31 ((howl (a))) ((have (john) (a)) (mouse (a))))
4 + 19 = (32 nil ((howl (a))))
4 + 21 = (33 ((cat (a))) ((ls (john))))
4 + 22 = (34 nil ((ls (john)) (have 333 (a)) (have 333 334) (mouse 334)))
4 + 22 = (35 nil ((ls 335) (have 335 (a)) (have (john) 337) (mouse 337)))
4 + 22 = (36 nil ((ls 338) (have 338 (a)) (have (john) (a)) (mouse (a))))
4 + 25 = (37 ((hound (a))) ((mouse (a))))
4 + 30 = (38 ((howl (a))) ((mouse (a))))
4 + 34 = (39 nil ((ls (john)) (have (john) 351) (mouse 351)))
4 + 34 = (40 nil ((ls (john)) (have (john) (a)) (mouse (a))))
4 + 35 = (41 nil ((ls 360) (have 360 (a)) (mouse (a))))
4 + 39 = (42 nil ((ls (john)) (mouse (a))))
5 + 14 = (43 ((hound (a))) ((have 412 (a)) (have 412 (b))))
5 + 16 = (44 ((hound (a))) ((have (john) (a)) (mouse (b))))
5 + 27 = (45 ((hound (a))) ((have (john) (b))))
5 + 29 = (46 ((hound (a))) ((mouse (b))))
6 + 15 = (47 nil ((cat (b)) (have (john) (b))))
6 + 16 = (48 nil ((have (john) 577) (cat 577)))
6 + 17 = (49 ((howl (a))) ((have 582 (a)) (have 582 (b))))
6 + 22 = (50 nil ((ls 600) (have 600 (a)) (have 601 (a)) (have 601 (b))))
6 + 29 = (51 nil ((cat (a))))
6 + 30 = (52 ((howl (a))) ((have (john) (b))))
6 + 34 = (53 nil ((ls (john)) (have 613 (a)) (have 613 (b))))
6 + 35 = (54 nil ((ls 621) (have 621 (a)) (have (john) (b))))
6 + 39 = (55 nil ((ls (john)) (have (john) (b))))
6 + 44 = (56 ((hound (a))) ((have (john) (a))))
6 + 46 = (57 ((hound (a))) nil)
7 + 9 = (58 nil ((hound 655) (have (john) 655)))
7 + 20 = (59 nil ((howl (b))))
7 + 21 = (60 ((cat (a))) ((have (john) (a))))
7 + 22 = (61 nil ((have (john) (a)) (have 694 (a)) (have 694 695) (mouse 695)))
7 + 23 = (62 nil ((hound (a))))
7 + 33 = (63 ((cat (a))) nil)
7 + 34 = (64 nil ((have 712 (a)) (have 712 713) (mouse 713)))
7 + 35 = (65 nil ((have (john) (a)) (have (john) 721) (mouse 721)))
7 + 36 = (66 nil ((have (john) (a)) (have (john) (a)) (mouse (a))))
7 + 39 = (67 nil ((have (john) 732) (mouse 732)))
7 + 40 = (68 nil ((have (john) (a)) (mouse (a))))
7 + 42 = (69 nil ((mouse (a))))
7 + 50 = (70 nil ((have (john) (a)) (have 745 (a)) (have 745 (b))))
7 + 53 = (71 nil ((have 752 (a)) (have 752 (b))))
7 + 54 = (72 nil ((have (john) (a)) (have (john) (b))))
7 + 55 = (73 nil ((have (john) (b))))
8 + 9 = (74 nil ((hound (b)) (ls (john))))
8 + 15 = (75 nil ((cat (b)) (mouse (b))))

8 + 17 = (76 ((howl (a))) ((have (john) (a)) (mouse (b))))
8 + 22 = (77 nil ((ls 833) (have 833 (a)) (have (john) (a)) (mouse (b))))
8 + 30 = (78 ((howl (a))) ((mouse (b))))
8 + 34 = (79 nil ((ls (john)) (have (john) (a)) (mouse (b))))
8 + 35 = (80 nil ((ls 855) (have 855 (a)) (mouse (b))))
8 + 39 = (81 nil ((ls (john)) (mouse (b))))
8 + 47 = (82 nil ((cat (b))))
8 + 49 = (83 ((howl (a))) ((have (john) (a))))
8 + 50 = (84 nil ((ls 881) (have 881 (a)) (have (john) (a))))
8 + 52 = (85 ((howl (a))) nil)
8 + 53 = (86 nil ((ls (john)) (have (john) (a))))
8 + 54 = (87 nil ((ls 888) (have 888 (a))))
8 + 55 = (88 nil ((ls (john))))
8 + 58 = (89 nil ((hound (b))))
8 + 61 = (90 nil ((have (john) (a)) (have (john) (a)) (mouse (b))))
8 + 64 = (91 nil ((have (john) (a)) (mouse (b))))
8 + 67 = (92 nil ((mouse (b))))
8 + 70 = (93 nil ((have (john) (a)) (have (john) (a))))
8 + 71 = (94 nil ((have (john) (a))))
8 + 73 = (95 nil nil)
FALSE!

RR
1 + 3 = (9 ((smart (a))) ((coyote 34) (beep (a))))
1 + 4 = (10 nil ((coyote 43) (coyote 44) (catch 44 (a)) (smart (a))))
1 + 5 = (11 ((frustrated 56) (catch 56 (a))) ((coyote 55) (coyote 56) (chase 56 (a))))
1 + 6 = (12 ((beep (a))) ((coyote 67)))
1 + 7 = (13 ((rr (a))) nil)
2 + 5 = (14 ((frustrated 136) (catch 136 (a))) ((coyote 136) (coyote 136) (rr (a))))
2 + 7 = (15 ((chase (b) (a))) nil)
2 + 11 = (16 ((frustrated 175) (catch 175 (a))) ((coyote 175) (coyote 176) (coyote 175)))
3 + 4 = (17 nil ((rr 225) (beep 225) (coyote 224) (rr 225) (catch 224 225)))
3 + 6 = (18 ((smart 252)) ((rr 252) (rr 252)))
3 + 10 = (19 nil ((rr (a)) (beep (a)) (coyote 274) (coyote 275) (catch 275 (a))))
3 + 12 = (20 ((smart (a))) ((rr (a)) (coyote 302)))
3 + 13 = (21 ((smart (a))) ((beep (a))))
4 + 5 = (22 ((frustrated 413)) ((coyote 413) (rr 414) (smart 414) (coyote 413) (rr 414) (chase 413 414)))
4 + 7 = (23 nil ((rr 436) (catch (b) 436) (smart 436)))
4 + 9 = (24 nil ((coyote 452) (rr (a)) (catch 452 (a)) (coyote 454) (beep (a))))
4 + 11 = (25 ((frustrated 477)) ((coyote 477) (rr (a)) (smart (a)) (coyote 478) (coyote 477) (chase 477 (a))))
4 + 13 = (26 nil ((coyote 501) (catch 501 (a)) (smart (a))))
4 + 14 = (27 ((frustrated 524)) ((coyote 524) (rr (a)) (smart (a)) (coyote 524) (coyote 524) (rr (a))))

4 + 16 = (28 ((frustrated 561)) ((coyote 561) (rr (a)) (smart (a)) (coyote 561) (coyote 562) (coyote 561)))

4 + 18 = (29 nil ((coyote 580) (rr 582) (catch 580 582) (rr 582) (rr 582)))

4 + 20 = (30 nil ((coyote 592) (rr (a)) (catch 592 (a)) (rr (a)) (coyote 594)))

4 + 21 = (31 nil ((coyote 601) (rr (a)) (catch 601 (a)) (beep (a))))

5 + 7 = (32 ((frustrated (b)) (catch (b) 679)) ((rr 679) (chase (b) 679)))

5 + 8 = (33 ((catch (b) 685)) ((coyote (b)) (rr 685) (chase (b) 685)))

5 + 10 = (34 ((frustrated 736)) ((coyote 736) (rr (a)) (chase 736 (a)) (coyote 735) (coyote 736) (smart (a))))

5 + 13 = (35 ((frustrated 806) (catch 806 (a))) ((coyote 806) (chase 806 (a))))

5 + 15 = (36 ((frustrated (b)) (catch (b) (a))) ((coyote (b)) (rr (a))))

5 + 17 = (37 ((frustrated 939)) ((coyote 939) (rr 938) (chase 939 938) (rr 938) (beep 938) (coyote 939) (rr 938)))

5 + 19 = (38 ((frustrated 1000)) ((coyote 1000) (rr (a)) (chase 1000 (a)) (rr (a)) (beep (a)) (coyote 999) (coyote 1000)))

5 + 23 = (39 ((frustrated (b))) ((coyote (b)) (rr 1106) (chase (b) 1106) (rr 1106) (smart 1106)))

5 + 26 = (40 ((frustrated 1224)) ((coyote 1224) (rr (a)) (chase 1224 (a)) (coyote 1224) (smart (a))))

5 + 29 = (41 ((frustrated 1363)) ((coyote 1363) (rr 1364) (chase 1363 1364) (coyote 1363) (rr 1364) (rr 1364) (rr 1364)))

5 + 30 = (42 ((frustrated 1403)) ((coyote 1403) (rr (a)) (chase 1403 (a)) (coyote 1403) (rr (a)) (rr (a)) (coyote 1404)))

5 + 31 = (43 ((frustrated 1433)) ((coyote 1433) (rr (a)) (chase 1433 (a)) (coyote 1433) (rr (a)) (beep (a))))

6 + 13 = (44 ((beep (a))) nil)

6 + 17 = (45 nil ((rr 2069) (rr 2069) (coyote 2070) (rr 2069) (catch 2070 2069)))

6 + 19 = (46 nil ((rr (a)) (rr (a)) (coyote 2090) (coyote 2091) (catch 2091 (a))))

6 + 21 = (47 ((smart (a))) ((rr (a))))

6 + 31 = (48 nil ((rr (a)) (coyote 2250) (rr (a)) (catch 2250 (a))))

6 + 43 = (49 ((frustrated 2431)) ((rr (a)) (coyote 2431) (rr (a)) (chase 2431 (a)) (coyote 2431) (rr (a))))

7 + 10 = (50 nil ((coyote 2493) (catch (b) (a)) (smart (a))))

7 + 11 = (51 ((frustrated (b)) (catch (b) (a))) ((coyote 2502) (chase (b) (a))))

7 + 16 = (52 ((frustrated (b)) (catch (b) (a))) ((coyote 2510) (coyote (b))))

7 + 16 = (53 ((frustrated 2511) (catch 2511 (a))) ((coyote 2511) (coyote 2511)))

7 + 17 = (54 nil ((rr 2519) (beep 2519) (rr 2519) (catch (b) 2519)))

7 + 19 = (55 nil ((rr (a)) (beep (a)) (coyote 2533) (catch (b) (a))))

7 + 25 = (56 ((frustrated (b))) ((rr (a)) (smart (a)) (coyote 2565) (coyote (b)) (chase (b) (a))))

7 + 26 = (57 nil ((catch (b) (a)) (smart (a))))

7 + 27 = (58 ((frustrated (b))) ((rr (a)) (smart (a)) (coyote (b)) (coyote (b)) (rr (a))))

7 + 28 = (59 ((frustrated (b))) ((rr (a)) (smart (a)) (coyote (b)) (coyote 2586) (coyote (b))))

7 + 28 = (60 ((frustrated 2593)) ((coyote 2593) (rr (a)) (smart (a)) (coyote 2593) (coyote 2593)))

7 + 29 = (61 nil ((rr 2598) (catch (b) 2598) (rr 2598) (rr 2598)))

7 + 30 = (62 nil ((rr (a)) (catch (b) (a)) (rr (a)) (coyote 2608)))
7 + 31 = (63 nil ((rr (a)) (catch (b) (a)) (beep (a))))
7 + 33 = (64 ((catch (b) 2623)) ((rr 2623) (chase (b) 2623)))
7 + 35 = (65 ((frustrated (b)) (catch (b) (a))) ((chase (b) (a))))
7 + 36 = (66 ((frustrated (b)) (catch (b) (a))) ((rr (a))))
7 + 37 = (67 ((frustrated (b))) ((rr 2641) (chase (b) 2641) (rr 2641) (beep 2641) (coyote (b)) (rr 2641)))
7 + 38 = (68 ((frustrated (b))) ((rr (a)) (chase (b) (a)) (rr (a)) (beep (a)) (coyote 2655) (coyote (b))))
7 + 39 = (69 ((frustrated (b))) ((rr 2668) (chase (b) 2668) (rr 2668) (smart 2668)))
7 + 40 = (70 ((frustrated (b))) ((rr (a)) (chase (b) (a)) (coyote (b)) (smart (a))))
7 + 41 = (71 ((frustrated (b))) ((rr 2679) (chase (b) 2679) (coyote (b)) (rr 2679) (rr 2679) (rr 2679)))
7 + 42 = (72 ((frustrated (b))) ((rr (a)) (chase (b) (a)) (coyote (b)) (rr (a)) (rr (a)) (coyote 2693)))
7 + 43 = (73 ((frustrated (b))) ((rr (a)) (chase (b) (a)) (coyote (b)) (rr (a)) (beep (a))))
7 + 48 = (74 nil ((rr (a)) (rr (a)) (catch (b) (a))))
7 + 49 = (75 ((frustrated (b))) ((rr (a)) (rr (a)) (chase (b) (a)) (coyote (b)) (rr (a))))
7 + 52 = (76 ((frustrated (b)) (catch (b) (a))) ((coyote (b))))
7 + 52 = (77 ((frustrated (b)) (catch (b) (a))) ((coyote 2748)))
7 + 56 = (78 ((frustrated (b))) ((rr (a)) (smart (a)) (coyote 2762) (chase (b) (a))))
7 + 58 = (79 ((frustrated (b))) ((rr (a)) (smart (a)) (coyote (b)) (rr (a))))
7 + 59 = (80 ((frustrated (b))) ((rr (a)) (smart (a)) (coyote 2766) (coyote (b))))
7 + 59 = (81 ((frustrated (b))) ((rr (a)) (smart (a)) (coyote (b)) (coyote (b))))
7 + 67 = (82 ((frustrated (b))) ((rr 2788) (chase (b) 2788) (rr 2788) (beep 2788) (rr 2788)))
7 + 68 = (83 ((frustrated (b))) ((rr (a)) (chase (b) (a)) (rr (a)) (beep (a)) (coyote 2795)))
7 + 70 = (84 ((frustrated (b))) ((rr (a)) (chase (b) (a)) (smart (a))))
7 + 71 = (85 ((frustrated (b))) ((rr 2802) (chase (b) 2802) (rr 2802) (rr 2802) (rr 2802)))
7 + 72 = (86 ((frustrated (b))) ((rr (a)) (chase (b) (a)) (rr (a)) (rr (a)) (coyote 2808)))
7 + 73 = (87 ((frustrated (b))) ((rr (a)) (chase (b) (a)) (rr (a)) (beep (a))))
7 + 75 = (88 ((frustrated (b))) ((rr (a)) (rr (a)) (chase (b) (a)) (rr (a))))
7 + 76 = (89 ((frustrated (b)) (catch (b) (a))) nil)
7 + 79 = (90 ((frustrated (b))) ((rr (a)) (smart (a)) (rr (a))))
7 + 80 = (91 ((frustrated (b))) ((rr (a)) (smart (a)) (coyote (b))))
7 + 80 = (92 ((frustrated (b))) ((rr (a)) (smart (a)) (coyote 2820)))
7 + 91 = (93 ((frustrated (b))) ((rr (a)) (smart (a))))
8 + 11 = (94 ((catch (b) (a))) ((coyote 2846) (coyote (b)) (chase (b) (a))))
8 + 14 = (95 ((catch (b) (a))) ((coyote (b)) (coyote (b)) (rr (a))))
8 + 16 = (96 ((catch (b) (a))) ((coyote (b)) (coyote 2853) (coyote (b))))
8 + 22 = (97 nil ((coyote (b)) (rr 2859) (smart 2859) (coyote (b)) (rr 2859) (chase (b) 2859)))
8 + 25 = (98 nil ((coyote (b)) (rr (a)) (smart (a)) (coyote 2861) (coyote (b)) (chase (b) (a))))
8 + 27 = (99 nil ((coyote (b)) (rr (a)) (smart (a)) (coyote (b)) (coyote (b)) (rr (a))))
8 + 28 = (100 nil ((coyote (b)) (rr (a)) (smart (a)) (coyote (b)) (coyote 2864) (coyote (b))))
8 + 35 = (101 ((catch (b) (a))) ((coyote (b)) (chase (b) (a))))

8 + 36 = (102 ((catch (b) (a))) ((coyote (b)) (rr (a))))

8 + 37 = (103 nil ((coyote (b)) (rr 2873) (chase (b) 2873) (rr 2873) (beep 2873) (coyote (b)) (rr 2873)))

8 + 38 = (104 nil ((coyote (b)) (rr (a)) (chase (b) (a)) (rr (a)) (beep (a)) (coyote 2875) (coyote (b))))

8 + 39 = (105 nil ((coyote (b)) (rr 2876) (chase (b) 2876) (rr 2876) (smart 2876)))

8 + 40 = (106 nil ((coyote (b)) (rr (a)) (chase (b) (a)) (coyote (b)) (smart (a))))

8 + 41 = (107 nil ((coyote (b)) (rr 2879) (chase (b) 2879) (coyote (b)) (rr 2879) (rr 2879) (rr 2879)))

8 + 42 = (108 nil ((coyote (b)) (rr (a)) (chase (b) (a)) (coyote (b)) (rr (a)) (rr (a)) (coyote 2881)))

8 + 43 = (109 nil ((coyote (b)) (rr (a)) (chase (b) (a)) (coyote (b)) (rr (a)) (beep (a))))

8 + 49 = (110 nil ((rr (a)) (coyote (b)) (rr (a)) (chase (b) (a)) (coyote (b)) (rr (a))))

8 + 51 = (111 ((catch (b) (a))) ((coyote 2884) (chase (b) (a))))

8 + 52 = (112 ((catch (b) (a))) ((coyote 2886) (coyote (b))))

8 + 53 = (113 ((catch (b) (a))) ((coyote (b)) (coyote (b))))

8 + 56 = (114 nil ((rr (a)) (smart (a)) (coyote 2890) (coyote (b)) (chase (b) (a))))

8 + 58 = (115 nil ((rr (a)) (smart (a)) (coyote (b)) (coyote (b)) (rr (a))))

8 + 59 = (116 nil ((rr (a)) (smart (a)) (coyote (b)) (coyote 2891) (coyote (b))))

8 + 60 = (117 nil ((coyote (b)) (rr (a)) (smart (a)) (coyote (b)) (coyote (b))))

8 + 65 = (118 ((catch (b) (a))) ((chase (b) (a))))

8 + 66 = (119 ((catch (b) (a))) ((rr (a))))

8 + 67 = (120 nil ((rr 2894) (chase (b) 2894) (rr 2894) (beep 2894) (coyote (b)) (rr 2894)))

8 + 68 = (121 nil ((rr (a)) (chase (b) (a)) (rr (a)) (beep (a)) (coyote 2895) (coyote (b))))

8 + 69 = (122 nil ((rr 2896) (chase (b) 2896) (rr 2896) (smart 2896)))

8 + 70 = (123 nil ((rr (a)) (chase (b) (a)) (coyote (b)) (smart (a))))

8 + 71 = (124 nil ((rr 2897) (chase (b) 2897) (coyote (b)) (rr 2897) (rr 2897) (rr 2897)))

8 + 72 = (125 nil ((rr (a)) (chase (b) (a)) (coyote (b)) (rr (a)) (rr (a)) (coyote 2898)))

8 + 73 = (126 nil ((rr (a)) (chase (b) (a)) (coyote (b)) (rr (a)) (beep (a))))

8 + 75 = (127 nil ((rr (a)) (rr (a)) (chase (b) (a)) (coyote (b)) (rr (a))))

8 + 76 = (128 ((catch (b) (a))) ((coyote (b))))

8 + 77 = (129 ((catch (b) (a))) ((coyote 2899)))

8 + 78 = (130 nil ((rr (a)) (smart (a)) (coyote 2901) (chase (b) (a))))

8 + 79 = (131 nil ((rr (a)) (smart (a)) (coyote (b)) (rr (a))))

8 + 80 = (132 nil ((rr (a)) (smart (a)) (coyote 2902) (coyote (b))))

8 + 81 = (133 nil ((rr (a)) (smart (a)) (coyote (b)) (coyote (b))))

8 + 82 = (134 nil ((rr 2903) (chase (b) 2903) (rr 2903) (beep 2903) (rr 2903)))

8 + 83 = (135 nil ((rr (a)) (chase (b) (a)) (rr (a)) (beep (a)) (coyote 2904)))

8 + 84 = (136 nil ((rr (a)) (chase (b) (a)) (smart (a))))

8 + 85 = (137 nil ((rr 2905) (chase (b) 2905) (rr 2905) (rr 2905) (rr 2905)))

8 + 86 = (138 nil ((rr (a)) (chase (b) (a)) (rr (a)) (rr (a)) (coyote 2906)))

8 + 87 = (139 nil ((rr (a)) (chase (b) (a)) (rr (a)) (beep (a))))

8 + 88 = (140 nil ((rr (a)) (rr (a)) (chase (b) (a)) (rr (a))))

8 + 89 = (141 ((catch (b) (a))) nil)

8 + 90 = (142 nil ((rr (a)) (smart (a)) (rr (a))))

8 + 91 = (143 nil ((rr (a)) (smart (a)) (coyote (b))))

8 + 92 = (144 nil ((rr (a)) (smart (a)) (coyote 2907)))

8 + 93 = (145 nil ((rr (a)) (smart (a))))

9 + 10 = (146 nil ((coyote 2922) (beep (a)) (coyote 2923) (coyote 2924) (catch 2924 (a))))

9 + 12 = (147 ((smart (a))) ((coyote 2950) (coyote 2951)))

9 + 22 = (148 ((frustrated 3047)) ((coyote 3046) (beep (a)) (coyote 3047) (rr (a)) (coyote 3047) (rr (a)) (chase 3047 (a))))

9 + 25 = (149 ((frustrated 3092)) ((coyote 3091) (beep (a)) (coyote 3092) (rr (a)) (coyote 3093) (coyote 3092) (chase 3092 (a))))

9 + 26 = (150 nil ((coyote 3113) (beep (a)) (coyote 3114) (catch 3114 (a))))

9 + 27 = (151 ((frustrated 3120)) ((coyote 3119) (beep (a)) (coyote 3120) (rr (a)) (coyote 3120) (coyote 3120) (rr (a))))

9 + 28 = (152 ((frustrated 3138)) ((coyote 3137) (beep (a)) (coyote 3138) (rr (a)) (coyote 3138) (coyote 3139) (coyote 3138)))

9 + 40 = (153 ((frustrated 3334)) ((coyote 3333) (beep (a)) (coyote 3334) (rr (a)) (chase 3334 (a)) (coyote 3334)))

9 + 44 = (154 ((smart (a))) ((coyote 3410)))

9 + 50 = (155 nil ((coyote 3472) (beep (a)) (coyote 3473) (catch (b) (a))))

9 + 56 = (156 ((frustrated (b))) ((coyote 3528) (beep (a)) (rr (a)) (coyote 3529) (coyote (b)) (chase (b) (a))))

9 + 57 = (157 nil ((coyote 3541) (beep (a)) (catch (b) (a))))

9 + 58 = (158 ((frustrated (b))) ((coyote 3543) (beep (a)) (rr (a)) (coyote (b)) (coyote (b)) (rr (a))))

9 + 59 = (159 ((frustrated (b))) ((coyote 3551) (beep (a)) (rr (a)) (coyote (b)) (coyote 3552) (coyote (b))))

9 + 60 = (160 ((frustrated 3568)) ((coyote 3567) (beep (a)) (coyote 3568) (rr (a)) (coyote 3568) (coyote 3568)))

9 + 70 = (161 ((frustrated (b))) ((coyote 3661) (beep (a)) (rr (a)) (chase (b) (a)) (coyote (b))))

9 + 78 = (162 ((frustrated (b))) ((coyote 3730) (beep (a)) (rr (a)) (coyote 3731) (chase (b) (a))))

9 + 79 = (163 ((frustrated (b))) ((coyote 3741) (beep (a)) (rr (a)) (coyote (b)) (rr (a))))

9 + 80 = (164 ((frustrated (b))) ((coyote 3748) (beep (a)) (rr (a)) (coyote 3749) (coyote (b))))

9 + 81 = (165 ((frustrated (b))) ((coyote 3759) (beep (a)) (rr (a)) (coyote (b)) (coyote (b))))

9 + 84 = (166 ((frustrated (b))) ((coyote 3794) (beep (a)) (rr (a)) (chase (b) (a))))

9 + 90 = (167 ((frustrated (b))) ((coyote 3842) (beep (a)) (rr (a)) (rr (a))))

9 + 91 = (168 ((frustrated (b))) ((coyote 3847) (beep (a)) (rr (a)) (coyote (b))))

9 + 92 = (169 ((frustrated (b))) ((coyote 3853) (beep (a)) (rr (a)) (coyote 3854)))

9 + 93 = (170 ((frustrated (b))) ((coyote 3862) (beep (a)) (rr (a))))

9 + 98 = (171 nil ((coyote 3906) (beep (a)) (coyote (b)) (rr (a)) (coyote 3907) (coyote (b)) (chase (b) (a))))

9 + 99 = (172 nil ((coyote 3916) (beep (a)) (coyote (b)) (rr (a)) (coyote (b)) (coyote (b)) (rr (a))))

9 + 100 = (173 nil ((coyote 3924) (beep (a)) (coyote (b)) (rr (a)) (coyote (b)) (coyote 3925) (coyote (b))))

9 + 106 = (174 nil ((coyote 3982) (beep (a)) (coyote (b)) (rr (a)) (chase (b) (a)) (coyote (b))))

9 + 114 = (175 nil ((coyote 4045) (beep (a)) (rr (a)) (coyote 4046) (coyote (b)) (chase (b) (a))))
9 + 115 = (176 nil ((coyote 4054) (beep (a)) (rr (a)) (coyote (b)) (coyote (b)) (rr (a))))
9 + 116 = (177 nil ((coyote 4060) (beep (a)) (rr (a)) (coyote (b)) (coyote 4061) (coyote (b))))
9 + 117 = (178 nil ((coyote 4070) (beep (a)) (coyote (b)) (rr (a)) (coyote (b)) (coyote (b))))
9 + 123 = (179 nil ((coyote 4114) (beep (a)) (rr (a)) (chase (b) (a)) (coyote (b))))
9 + 130 = (180 nil ((coyote 4160) (beep (a)) (rr (a)) (coyote 4161) (chase (b) (a))))
9 + 131 = (181 nil ((coyote 4167) (beep (a)) (rr (a)) (coyote (b)) (rr (a))))
9 + 132 = (182 nil ((coyote 4172) (beep (a)) (rr (a)) (coyote 4173) (coyote (b))))
9 + 133 = (183 nil ((coyote 4179) (beep (a)) (rr (a)) (coyote (b)) (coyote (b))))
9 + 136 = (184 nil ((coyote 4204) (beep (a)) (rr (a)) (chase (b) (a))))
9 + 142 = (185 nil ((coyote 4236) (beep (a)) (rr (a)) (rr (a))))
9 + 143 = (186 nil ((coyote 4239) (beep (a)) (rr (a)) (coyote (b))))
9 + 144 = (187 nil ((coyote 4243) (beep (a)) (rr (a)) (coyote 4244)))
9 + 145 = (188 nil ((coyote 4248) (beep (a)) (rr (a))))
10 + 11 = (189 ((frustrated 4955)) ((coyote 4953) (coyote 4955) (smart (a)) (coyote 4956) (coyote 4955) (chase 4955 (a))))
10 + 14 = (190 ((frustrated 5002)) ((coyote 5000) (coyote 5002) (smart (a)) (coyote 5002) (coyote 5002) (rr (a))))
10 + 16 = (191 ((frustrated 5039)) ((coyote 5037) (coyote 5039) (smart (a)) (coyote 5039) (coyote 5040) (coyote 5039)))
10 + 20 = (192 nil ((coyote 5070) (coyote 5071) (catch 5071 (a)) (rr (a)) (coyote 5072)))
10 + 35 = (193 ((frustrated 5210)) ((coyote 5208) (coyote 5210) (smart (a)) (coyote 5210) (chase 5210 (a))))
10 + 47 = (194 nil ((coyote 5347) (coyote 5348) (catch 5348 (a)) (rr (a))))
10 + 51 = (195 ((frustrated (b))) ((coyote 5376) (coyote (b)) (smart (a)) (coyote 5378) (chase (b) (a))))
10 + 52 = (196 ((frustrated (b))) ((coyote 5400) (coyote (b)) (smart (a)) (coyote 5402) (coyote (b))))
10 + 53 = (197 ((frustrated 5426)) ((coyote 5424) (coyote 5426) (smart (a)) (coyote 5426) (coyote 5426)))
10 + 65 = (198 ((frustrated (b))) ((coyote 5499) (coyote (b)) (smart (a)) (chase (b) (a))))
10 + 76 = (199 ((frustrated (b))) ((coyote 5615) (coyote (b)) (smart (a)) (coyote (b))))
10 + 77 = (200 ((frustrated (b))) ((coyote 5636) (coyote (b)) (smart (a)) (coyote 5638)))
10 + 89 = (201 ((frustrated (b))) ((coyote 5767) (coyote (b)) (smart (a))))
10 + 94 = (202 nil ((coyote 5815) (coyote (b)) (smart (a)) (coyote 5817) (coyote (b)) (chase (b) (a))))
10 + 96 = (203 nil ((coyote 5835) (coyote (b)) (smart (a)) (coyote (b)) (coyote 5837) (coyote (b))))
10 + 101 = (204 nil ((coyote 5845) (coyote (b)) (smart (a)) (coyote (b)) (chase (b) (a))))
10 + 111 = (205 nil ((coyote 5863) (coyote (b)) (smart (a)) (coyote 5865) (chase (b) (a))))
10 + 112 = (206 nil ((coyote 5875) (coyote (b)) (smart (a)) (coyote 5877) (coyote (b))))
10 + 113 = (207 nil ((coyote 5885) (coyote (b)) (smart (a)) (coyote (b)) (coyote (b))))
10 + 118 = (208 nil ((coyote 5893) (coyote (b)) (smart (a)) (chase (b) (a))))

10 + 128 = (209 nil ((coyote 5909) (coyote (b)) (smart (a)) (coyote (b))))

10 + 129 = (210 nil ((coyote 5919) (coyote (b)) (smart (a)) (coyote 5921)))

10 + 141 = (211 nil ((coyote 5929) (coyote (b)) (smart (a))))

10 + 147 = (212 nil ((coyote 5945) (coyote 5946) (catch 5946 (a)) (coyote 5947) (coyote 5948)))

10 + 154 = (213 nil ((coyote 6046) (coyote 6047) (catch 6047 (a)) (coyote 6048)))

11 + 19 = (214 ((frustrated 6624)) ((coyote 6622) (coyote 6624) (chase 6624 (a)) (rr (a)) (beep (a)) (coyote 6623) (coyote 6624)))

11 + 29 = (215 ((frustrated 6987)) ((coyote 6986) (coyote 6987) (chase 6987 (a)) (coyote 6987) (rr (a)) (rr (a)) (rr (a))))

11 + 30 = (216 ((frustrated 7027)) ((coyote 7026) (coyote 7027) (chase 7027 (a)) (coyote 7027) (rr (a)) (rr (a)) (coyote 7028)))

11 + 46 = (217 ((frustrated 7708)) ((coyote 7706) (coyote 7708) (chase 7708 (a)) (rr (a)) (rr (a)) (coyote 7707) (coyote 7708)))

11 + 48 = (218 ((frustrated 7742)) ((coyote 7741) (coyote 7742) (chase 7742 (a)) (rr (a)) (coyote 7742) (rr (a))))

11 + 62 = (219 ((frustrated (b))) ((coyote 8135) (coyote (b)) (chase (b) (a)) (rr (a)) (rr (a)) (coyote 8136)))

11 + 74 = (220 ((frustrated (b))) ((coyote 8480) (coyote (b)) (chase (b) (a)) (rr (a)) (rr (a))))

11 + 146 = (221 ((frustrated 10236)) ((coyote 10233) (coyote 10236) (chase 10236 (a)) (coyote 10234) (beep (a)) (coyote 10235) (coyote 10236)))

11 + 150 = (222 ((frustrated 10449)) ((coyote 10447) (coyote 10449) (chase 10449 (a)) (coyote 10448) (beep (a)) (coyote 10449)))

11 + 155 = (223 ((frustrated (b))) ((coyote 10707) (coyote (b)) (chase (b) (a)) (coyote 10708) (beep (a)) (coyote 10709)))

11 + 157 = (224 ((frustrated (b))) ((coyote 10786) (coyote (b)) (chase (b) (a)) (coyote 10787) (beep (a))))

11 + 192 = (225 ((frustrated 12242)) ((coyote 12240) (coyote 12242) (chase 12242 (a)) (coyote 12241) (coyote 12242) (rr (a)) (coyote 12243)))

11 + 194 = (226 ((frustrated 12333)) ((coyote 12331) (coyote 12333) (chase 12333 (a)) (coyote 12332) (coyote 12333) (rr (a))))

11 + 212 = (227 ((frustrated 13010)) ((coyote 13008) (coyote 13010) (chase 13010 (a)) (coyote 13009) (coyote 13010) (coyote 13011) (coyote 13012)))

11 + 213 = (228 ((frustrated 13058)) ((coyote 13056) (coyote 13058) (chase 13058 (a)) (coyote 13057) (coyote 13058) (coyote 13059)))

12 + 19 = (229 nil ((coyote 14288) (rr (a)) (coyote 14289) (coyote 14290) (catch 14290 (a))))

12 + 55 = (230 nil ((coyote 14728) (rr (a)) (coyote 14729) (catch (b) (a))))

12 + 63 = (231 nil ((coyote 14796) (rr (a)) (catch (b) (a))))

12 + 83 = (232 ((frustrated (b))) ((coyote 14952) (rr (a)) (chase (b) (a)) (rr (a)) (coyote 14953)))

12 + 87 = (233 ((frustrated (b))) ((coyote 14989) (rr (a)) (chase (b) (a)) (rr (a))))

12 + 104 = (234 nil ((coyote 15107) (coyote (b)) (rr (a)) (chase (b) (a)) (rr (a)) (coyote 15108) (coyote (b))))

12 + 109 = (235 nil ((coyote 15161) (coyote (b)) (rr (a)) (chase (b) (a)) (coyote (b)) (rr (a))))

12 + 121 = (236 nil ((coyote 15235) (rr (a)) (chase (b) (a)) (rr (a)) (coyote 15236) (coyote (b))))

12 + 126 = (237 nil ((coyote 15281) (rr (a)) (chase (b) (a)) (coyote (b)) (rr (a))))

12 + 135 = (238 nil ((coyote 15333) (rr (a)) (chase (b) (a)) (rr (a)) (coyote 15334)))

12 + 139 = (239 nil ((coyote 15363) (rr (a)) (chase (b) (a)) (rr (a))))

12 + 146 = (240 nil ((coyote 15387) (coyote 15388) (coyote 15389) (coyote 15390) (catch 15390 (a))))

12 + 149 = (241 ((frustrated 15441)) ((coyote 15440) (coyote 15442) (coyote 15441) (rr (a)) (coyote 15443) (coyote 15441) (chase 15441 (a))))

12 + 150 = (242 nil ((coyote 15471) (coyote 15472) (coyote 15473) (catch 15473 (a))))

12 + 151 = (243 ((frustrated 15484)) ((coyote 15483) (coyote 15485) (coyote 15484) (rr (a)) (coyote 15484) (coyote 15484) (rr (a))))

12 + 152 = (244 ((frustrated 15509)) ((coyote 15508) (coyote 15510) (coyote 15509) (rr (a)) (coyote 15509) (coyote 15511) (coyote 15509)))

12 + 153 = (245 ((frustrated 15540)) ((coyote 15539) (coyote 15541) (coyote 15540) (rr (a)) (chase 15540 (a)) (coyote 15540)))

12 + 155 = (246 nil ((coyote 15564) (coyote 15565) (coyote 15566) (catch (b) (a))))

12 + 156 = (247 ((frustrated (b))) ((coyote 15576) (coyote 15577) (rr (a)) (coyote 15578) (coyote (b)) (chase (b) (a))))

12 + 157 = (248 nil ((coyote 15596) (coyote 15597) (catch (b) (a))))

12 + 158 = (249 ((frustrated (b))) ((coyote 15602) (coyote 15603) (rr (a)) (coyote (b)) (coyote (b)) (rr (a))))

12 + 159 = (250 ((frustrated (b))) ((coyote 15617) (coyote 15618) (rr (a)) (coyote (b)) (coyote 15619) (coyote (b))))

12 + 160 = (251 ((frustrated 15639)) ((coyote 15638) (coyote 15640) (coyote 15639) (rr (a)) (coyote 15639) (coyote 15639)))

12 + 161 = (252 ((frustrated (b))) ((coyote 15658) (coyote 15659) (rr (a)) (chase (b) (a)) (coyote (b))))

12 + 162 = (253 ((frustrated (b))) ((coyote 15671) (coyote 15672) (rr (a)) (coyote 15673) (chase (b) (a))))

12 + 163 = (254 ((frustrated (b))) ((coyote 15688) (coyote 15689) (rr (a)) (coyote (b)) (rr (a))))

12 + 164 = (255 ((frustrated (b))) ((coyote 15701) (coyote 15702) (rr (a)) (coyote 15703) (coyote (b))))

12 + 165 = (256 ((frustrated (b))) ((coyote 15718) (coyote 15719) (rr (a)) (coyote (b)) (coyote (b))))

12 + 166 = (257 ((frustrated (b))) ((coyote 15730) (coyote 15731) (rr (a)) (chase (b) (a))))

12 + 167 = (258 ((frustrated (b))) ((coyote 15740) (coyote 15741) (rr (a)) (rr (a))))

12 + 168 = (259 ((frustrated (b))) ((coyote 15750) (coyote 15751) (rr (a)) (coyote (b))))

12 + 169 = (260 ((frustrated (b))) ((coyote 15761) (coyote 15762) (rr (a)) (coyote 15763)))

12 + 170 = (261 ((frustrated (b))) ((coyote 15775) (coyote 15776) (rr (a))))

12 + 171 = (262 nil ((coyote 15784) (coyote 15785) (coyote (b)) (rr (a)) (coyote 15786) (coyote (b)) (chase (b) (a))))

12 + 172 = (263 nil ((coyote 15804) (coyote 15805) (coyote (b)) (rr (a)) (coyote (b)) (coyote (b)) (rr (a))))

12 + 173 = (264 nil ((coyote 15819) (coyote 15820) (coyote (b)) (rr (a)) (coyote (b)) (coyote 15821) (coyote (b))))

12 + 174 = (265 nil ((coyote 15839) (coyote 15840) (coyote (b)) (rr (a)) (chase (b) (a)) (coyote (b))))

12 + 175 = (266 nil ((coyote 15852) (coyote 15853) (rr (a)) (coyote 15854) (coyote (b)) (chase (b) (a))))

12 + 176 = (267 nil ((coyote 15869) (coyote 15870) (rr (a)) (coyote (b)) (coyote (b)) (rr (a))))

12 + 177 = (268 nil ((coyote 15882) (coyote 15883) (rr (a)) (coyote (b)) (coyote 15884) (coyote (b))))

12 + 178 = (269 nil ((coyote 15899) (coyote 15900) (coyote (b)) (rr (a)) (coyote (b)) (coyote (b))))

12 + 179 = (270 nil ((coyote 15911) (coyote 15912) (rr (a)) (chase (b) (a)) (coyote (b))))

12 + 180 = (271 nil ((coyote 15922) (coyote 15923) (rr (a)) (coyote 15924) (chase (b) (a))))

12 + 181 = (272 nil ((coyote 15936) (coyote 15937) (rr (a)) (coyote (b)) (rr (a))))

12 + 182 = (273 nil ((coyote 15947) (coyote 15948) (rr (a)) (coyote 15949) (coyote (b))))

12 + 183 = (274 nil ((coyote 15961) (coyote 15962) (rr (a)) (coyote (b)) (coyote (b))))

12 + 184 = (275 nil ((coyote 15971) (coyote 15972) (rr (a)) (chase (b) (a))))

12 + 185 = (276 nil ((coyote 15979) (coyote 15980) (rr (a)) (rr (a))))

12 + 186 = (277 nil ((coyote 15987) (coyote 15988) (rr (a)) (coyote (b))))

12 + 187 = (278 nil ((coyote 15996) (coyote 15997) (rr (a)) (coyote 15998)))

12 + 188 = (279 nil ((coyote 16007) (coyote 16008) (rr (a))))

12 + 221 = (280 ((frustrated 16591)) ((coyote 16590) (coyote 16592) (coyote 16591) (chase 16591 (a)) (coyote 16593) (coyote 16594) (coyote 16591)))

12 + 222 = (281 ((frustrated 16627)) ((coyote 16626) (coyote 16628) (coyote 16627) (chase 16627 (a)) (coyote 16629) (coyote 16627)))

12 + 223 = (282 ((frustrated (b))) ((coyote 16654) (coyote 16655) (coyote (b)) (chase (b) (a)) (coyote 16656) (coyote 16657)))

12 + 224 = (283 ((frustrated (b))) ((coyote 16678) (coyote 16679) (coyote (b)) (chase (b) (a)) (coyote 16680)))

13 + 24 = (284 nil ((coyote 17992) (catch 17992 (a)) (coyote 17993) (beep (a))))

13 + 25 = (285 ((frustrated 18002)) ((coyote 18002) (smart (a)) (coyote 18003) (coyote 18002) (chase 18002 (a))))

13 + 28 = (286 ((frustrated 18023)) ((coyote 18023) (smart (a)) (coyote 18023) (coyote 18024) (coyote 18023)))

13 + 30 = (287 nil ((coyote 18045) (catch 18045 (a)) (rr (a)) (coyote 18046)))

13 + 31 = (288 nil ((coyote 18054) (catch 18054 (a)) (beep (a))))

13 + 38 = (289 ((frustrated 18092)) ((coyote 18092) (chase 18092 (a)) (rr (a)) (beep (a)) (coyote 18093) (coyote 18092)))

13 + 40 = (290 ((frustrated 18110)) ((coyote 18110) (chase 18110 (a)) (coyote 18110) (smart (a))))

13 + 42 = (291 ((frustrated 18130)) ((coyote 18130) (chase 18130 (a)) (coyote 18130) (rr (a)) (rr (a)) (coyote 18131)))

13 + 43 = (292 ((frustrated 18143)) ((coyote 18143) (chase 18143 (a)) (coyote 18143) (rr (a)) (beep (a))))

13 + 47 = (293 ((smart (a))) nil)
13 + 48 = (294 nil ((coyote 18168) (rr (a)) (catch 18168 (a))))
13 + 49 = (295 ((frustrated 18172)) ((coyote 18172) (rr (a)) (chase 18172 (a)) (coyote 18172) (rr (a))))
13 + 60 = (296 ((frustrated 18206)) ((coyote 18206) (smart (a)) (coyote 18206) (coyote 18206)))
13 + 63 = (297 nil ((catch (b) (a)) (beep (a))))
13 + 70 = (298 ((frustrated (b))) ((chase (b) (a)) (coyote (b)) (smart (a))))
13 + 73 = (299 ((frustrated (b))) ((chase (b) (a)) (coyote (b)) (rr (a)) (beep (a))))
13 + 74 = (300 nil ((rr (a)) (catch (b) (a))))
13 + 75 = (301 ((frustrated (b))) ((rr (a)) (chase (b) (a)) (coyote (b)) (rr (a))))
13 + 78 = (302 ((frustrated (b))) ((smart (a)) (coyote 18249) (chase (b) (a))))
13 + 81 = (303 ((frustrated (b))) ((smart (a)) (coyote (b)) (coyote (b))))
13 + 84 = (304 ((frustrated (b))) ((chase (b) (a)) (smart (a))))
13 + 87 = (305 ((frustrated (b))) ((chase (b) (a)) (rr (a)) (beep (a))))
13 + 88 = (306 ((frustrated (b))) ((rr (a)) (chase (b) (a)) (rr (a))))
13 + 91 = (307 ((frustrated (b))) ((smart (a)) (coyote (b))))
13 + 92 = (308 ((frustrated (b))) ((smart (a)) (coyote 18277)))
13 + 93 = (309 ((frustrated (b))) ((smart (a))))
13 + 106 = (310 nil ((coyote (b)) (chase (b) (a)) (coyote (b)) (smart (a))))
13 + 109 = (311 nil ((coyote (b)) (chase (b) (a)) (coyote (b)) (rr (a)) (beep (a))))
13 + 110 = (312 nil ((coyote (b)) (rr (a)) (chase (b) (a)) (coyote (b)) (rr (a))))
13 + 117 = (313 nil ((coyote (b)) (smart (a)) (coyote (b)) (coyote (b))))
13 + 123 = (314 nil ((chase (b) (a)) (coyote (b)) (smart (a))))
13 + 126 = (315 nil ((chase (b) (a)) (coyote (b)) (rr (a)) (beep (a))))
13 + 127 = (316 nil ((rr (a)) (chase (b) (a)) (coyote (b)) (rr (a))))
13 + 130 = (317 nil ((smart (a)) (coyote 18380) (chase (b) (a))))
13 + 133 = (318 nil ((smart (a)) (coyote (b)) (coyote (b))))
13 + 136 = (319 nil ((chase (b) (a)) (smart (a))))
13 + 139 = (320 nil ((chase (b) (a)) (rr (a)) (beep (a))))
13 + 140 = (321 nil ((rr (a)) (chase (b) (a)) (rr (a))))
13 + 143 = (322 nil ((smart (a)) (coyote (b))))
13 + 144 = (323 nil ((smart (a)) (coyote 18408)))
13 + 145 = (324 nil ((smart (a))))
13 + 149 = (325 ((frustrated 18453)) ((coyote 18454) (beep (a)) (coyote 18453) (coyote 18455) (coyote 18453) (chase 18453 (a))))
13 + 151 = (326 ((frustrated 18479)) ((coyote 18480) (beep (a)) (coyote 18479) (coyote 18479) (coyote 18479) (rr (a))))
13 + 152 = (327 ((frustrated 18496)) ((coyote 18497) (beep (a)) (coyote 18496) (coyote 18496) (coyote 18498) (coyote 18496)))
13 + 153 = (328 ((frustrated 18514)) ((coyote 18515) (beep (a)) (coyote 18514) (chase 18514 (a)) (coyote 18514)))
13 + 159 = (329 ((frustrated (b))) ((coyote 18554) (beep (a)) (coyote (b)) (coyote 18555) (coyote (b))))

13 + 160 = (330 ((frustrated 18568)) ((coyote 18569) (beep (a)) (coyote 18568) (coyote 18568) (coyote 18568)))
13 + 161 = (331 ((frustrated (b))) ((coyote 18576) (beep (a)) (chase (b) (a)) (coyote (b))))
13 + 162 = (332 ((frustrated (b))) ((coyote 18583) (beep (a)) (coyote 18584) (chase (b) (a))))
13 + 164 = (333 ((frustrated (b))) ((coyote 18598) (beep (a)) (coyote 18599) (coyote (b))))
13 + 165 = (334 ((frustrated (b))) ((coyote 18606) (beep (a)) (coyote (b)) (coyote (b))))
13 + 166 = (335 ((frustrated (b))) ((coyote 18611) (beep (a)) (chase (b) (a))))
13 + 168 = (336 ((frustrated (b))) ((coyote 18619) (beep (a)) (coyote (b))))
13 + 169 = (337 ((frustrated (b))) ((coyote 18625) (beep (a)) (coyote 18626)))
13 + 170 = (338 ((frustrated (b))) ((coyote 18631) (beep (a))))
13 + 171 = (339 nil ((coyote 18638) (beep (a)) (coyote (b)) (coyote 18639) (coyote (b)) (chase (b) (a))))
13 + 173 = (340 nil ((coyote 18659) (beep (a)) (coyote (b)) (coyote (b)) (coyote 18660) (coyote (b))))
13 + 174 = (341 nil ((coyote 18670) (beep (a)) (coyote (b)) (chase (b) (a)) (coyote (b))))
13 + 175 = (342 nil ((coyote 18677) (beep (a)) (coyote 18678) (coyote (b)) (chase (b) (a))))
13 + 177 = (343 nil ((coyote 18695) (beep (a)) (coyote (b)) (coyote 18696) (coyote (b))))
13 + 178 = (344 nil ((coyote 18706) (beep (a)) (coyote (b)) (coyote (b)) (coyote (b))))
13 + 179 = (345 nil ((coyote 18711) (beep (a)) (chase (b) (a)) (coyote (b))))
13 + 180 = (346 nil ((coyote 18718) (beep (a)) (coyote 18719) (chase (b) (a))))
13 + 182 = (347 nil ((coyote 18733) (beep (a)) (coyote 18734) (coyote (b))))
13 + 183 = (348 nil ((coyote 18741) (beep (a)) (coyote (b)) (coyote (b))))
13 + 184 = (349 nil ((coyote 18746) (beep (a)) (chase (b) (a))))
13 + 186 = (350 nil ((coyote 18754) (beep (a)) (coyote (b))))
13 + 187 = (351 nil ((coyote 18760) (beep (a)) (coyote 18761)))
13 + 188 = (352 nil ((coyote 18766) (beep (a))))
13 + 194 = (353 nil ((coyote 18846) (coyote 18847) (catch 18847 (a))))
13 + 216 = (354 ((frustrated 19049)) ((coyote 19050) (coyote 19049) (chase 19049 (a)) (coyote 19049) (rr (a)) (coyote 19051)))
13 + 218 = (355 ((frustrated 19085)) ((coyote 19086) (coyote 19085) (chase 19085 (a)) (coyote 19085) (rr (a))))
13 + 220 = (356 ((frustrated (b))) ((coyote 19106) (coyote (b)) (chase (b) (a)) (rr (a))))
13 + 225 = (357 ((frustrated 19202)) ((coyote 19203) (coyote 19202) (chase 19202 (a)) (coyote 19204) (coyote 19202) (coyote 19205)))
13 + 226 = (358 ((frustrated 19225)) ((coyote 19226) (coyote 19225) (chase 19225 (a)) (coyote 19227) (coyote 19225)))
13 + 231 = (359 nil ((coyote 19311) (catch (b) (a))))
13 + 233 = (360 ((frustrated (b))) ((coyote 19324) (chase (b) (a)) (rr (a))))
13 + 235 = (361 nil ((coyote 19343) (coyote (b)) (chase (b) (a)) (coyote (b)) (rr (a))))
13 + 237 = (362 nil ((coyote 19360) (chase (b) (a)) (coyote (b)) (rr (a))))
13 + 239 = (363 nil ((coyote 19375) (chase (b) (a)) (rr (a))))
13 + 243 = (364 ((frustrated 19447)) ((coyote 19448) (coyote 19449) (coyote 19447) (coyote 19447) (coyote 19447) (rr (a))))

13 + 244 = (365 ((frustrated 19471)) ((coyote 19472) (coyote 19473) (coyote 19471) (coyote 19471) (coyote 19474) (coyote 19471)))

13 + 250 = (366 ((frustrated (b))) ((coyote 19559) (coyote 19560) (coyote (b)) (coyote 19561) (coyote (b))))

13 + 251 = (367 ((frustrated 19580)) ((coyote 19581) (coyote 19582) (coyote 19580) (coyote 19580) (coyote 19580)))

13 + 252 = (368 ((frustrated (b))) ((coyote 19593) (coyote 19594) (chase (b) (a)) (coyote (b))))

13 + 253 = (369 ((frustrated (b))) ((coyote 19605) (coyote 19606) (coyote 19607) (chase (b) (a))))

13 + 255 = (370 ((frustrated (b))) ((coyote 19630) (coyote 19631) (coyote 19632) (coyote (b))))

13 + 256 = (371 ((frustrated (b))) ((coyote 19643) (coyote 19644) (coyote (b)) (coyote (b))))

13 + 257 = (372 ((frustrated (b))) ((coyote 19653) (coyote 19654) (chase (b) (a))))

13 + 259 = (373 ((frustrated (b))) ((coyote 19669) (coyote 19670) (coyote (b))))

13 + 260 = (374 ((frustrated (b))) ((coyote 19679) (coyote 19680) (coyote 19681)))

13 + 261 = (375 ((frustrated (b))) ((coyote 19689) (coyote 19690)))

13 + 262 = (376 nil ((coyote 19700) (coyote 19701) (coyote (b)) (coyote 19702) (coyote (b)) (chase (b) (a))))

13 + 264 = (377 nil ((coyote 19735) (coyote 19736) (coyote (b)) (coyote (b)) (coyote 19737) (coyote (b))))

13 + 265 = (378 nil ((coyote 19753) (coyote 19754) (coyote (b)) (chase (b) (a)) (coyote (b))))

13 + 266 = (379 nil ((coyote 19765) (coyote 19766) (coyote 19767) (coyote (b)) (chase (b) (a))))

13 + 268 = (380 nil ((coyote 19795) (coyote 19796) (coyote (b)) (coyote 19797) (coyote (b))))

13 + 269 = (381 nil ((coyote 19813) (coyote 19814) (coyote (b)) (coyote (b)) (coyote (b))))

13 + 270 = (382 nil ((coyote 19823) (coyote 19824) (chase (b) (a)) (coyote (b))))

13 + 271 = (383 nil ((coyote 19835) (coyote 19836) (coyote 19837) (chase (b) (a))))

13 + 273 = (384 nil ((coyote 19860) (coyote 19861) (coyote 19862) (coyote (b))))

13 + 274 = (385 nil ((coyote 19873) (coyote 19874) (coyote (b)) (coyote (b))))

13 + 275 = (386 nil ((coyote 19883) (coyote 19884) (chase (b) (a))))

13 + 277 = (387 nil ((coyote 19899) (coyote 19900) (coyote (b))))

13 + 278 = (388 nil ((coyote 19909) (coyote 19910) (coyote 19911)))

13 + 279 = (389 nil ((coyote 19919) (coyote 19920)))

13 + 287 = (390 nil ((coyote 20051) (catch 20051 (a)) (coyote 20052)))

13 + 292 = (391 ((frustrated 20089)) ((coyote 20089) (chase 20089 (a)) (coyote 20089) (beep (a))))

13 + 294 = (392 nil ((coyote 20092) (catch 20092 (a))))

13 + 295 = (393 ((frustrated 20095)) ((coyote 20095) (chase 20095 (a)) (coyote 20095) (rr (a))))

13 + 299 = (394 ((frustrated (b))) ((chase (b) (a)) (coyote (b)) (beep (a))))

13 + 300 = (395 nil ((catch (b) (a))))

13 + 301 = (396 ((frustrated (b))) ((chase (b) (a)) (coyote (b)) (rr (a))))

13 + 305 = (397 ((frustrated (b))) ((chase (b) (a)) (beep (a))))

13 + 306 = (398 ((frustrated (b))) ((chase (b) (a)) (rr (a))))

13 + 311 = (399 nil ((coyote (b)) (chase (b) (a)) (coyote (b)) (beep (a))))

13 + 312 = (400 nil ((coyote (b)) (chase (b) (a)) (coyote (b)) (rr (a))))

13 + 315 = (401 nil ((chase (b) (a)) (coyote (b)) (beep (a))))

13 + 316 = (402 nil ((chase (b) (a)) (coyote (b)) (rr (a))))

13 + 320 = (403 nil ((chase (b) (a)) (beep (a))))

13 + 321 = (404 nil ((chase (b) (a)) (rr (a))))

13 + 355 = (405 ((frustrated 20353)) ((coyote 20354) (coyote 20353) (chase 20353 (a)) (coyote 20353)))

13 + 356 = (406 ((frustrated (b))) ((coyote 20358) (coyote (b)) (chase (b) (a))))

13 + 360 = (407 ((frustrated (b))) ((coyote 20402) (chase (b) (a))))

13 + 361 = (408 nil ((coyote 20407) (coyote (b)) (chase (b) (a)) (coyote (b))))

13 + 362 = (409 nil ((coyote 20411) (chase (b) (a)) (coyote (b))))

13 + 363 = (410 nil ((coyote 20414) (chase (b) (a))))

13 + 393 = (411 ((frustrated 20718)) ((coyote 20718) (chase 20718 (a)) (coyote 20718)))

13 + 396 = (412 ((frustrated (b))) ((chase (b) (a)) (coyote (b))))

13 + 398 = (413 ((frustrated (b))) ((chase (b) (a))))

13 + 400 = (414 nil ((coyote (b)) (chase (b) (a)) (coyote (b))))

13 + 402 = (415 nil ((chase (b) (a)) (coyote (b))))

13 + 404 = (416 nil ((chase (b) (a))))

14 + 17 = (417 ((frustrated 20812)) ((coyote 20812) (coyote 20812) (rr (a)) (rr (a)) (beep (a)) (coyote 20812) (rr (a))))

14 + 24 = (418 ((frustrated 20955)) ((coyote 20955) (coyote 20955) (rr (a)) (coyote 20955) (rr (a)) (coyote 20956) (beep (a))))

14 + 29 = (419 ((frustrated 21117)) ((coyote 21117) (coyote 21117) (rr (a)) (coyote 21117) (rr (a)) (rr (a)) (rr (a))))

14 + 30 = (420 ((frustrated 21147)) ((coyote 21147) (coyote 21147) (rr (a)) (coyote 21147) (rr (a)) (rr (a)) (coyote 21148)))

14 + 31 = (421 ((frustrated 21168)) ((coyote 21168) (coyote 21168) (rr (a)) (coyote 21168) (rr (a)) (beep (a))))

14 + 46 = (422 ((frustrated 21632)) ((coyote 21632) (coyote 21632) (rr (a)) (rr (a)) (rr (a)) (coyote 21631) (coyote 21632)))

14 + 48 = (423 ((frustrated 21653)) ((coyote 21653) (coyote 21653) (rr (a)) (rr (a)) (coyote 21653) (rr (a))))

14 + 54 = (424 ((frustrated (b))) ((coyote (b)) (coyote (b)) (rr (a)) (rr (a)) (beep (a)) (rr (a))))

14 + 61 = (425 ((frustrated (b))) ((coyote (b)) (coyote (b)) (rr (a)) (rr (a)) (rr (a)) (rr (a))))

14 + 62 = (426 ((frustrated (b))) ((coyote (b)) (coyote (b)) (rr (a)) (rr (a)) (rr (a)) (coyote 21910)))

14 + 63 = (427 ((frustrated (b))) ((coyote (b)) (coyote (b)) (rr (a)) (rr (a)) (beep (a))))

14 + 74 = (428 ((frustrated (b))) ((coyote (b)) (coyote (b)) (rr (a)) (rr (a)) (rr (a))))

14 + 146 = (429 ((frustrated 23199)) ((coyote 23199) (coyote 23199) (rr (a)) (coyote 23197) (beep (a)) (coyote 23198) (coyote 23199)))

14 + 194 = (430 ((frustrated 24736)) ((coyote 24736) (coyote 24736) (rr (a)) (coyote 24735) (coyote 24736) (rr (a))))

14 + 229 = (431 ((frustrated 26250)) ((coyote 26250) (coyote 26250) (rr (a)) (coyote 26248) (rr (a)) (coyote 26249) (coyote 26250)))

14 + 231 = (432 ((frustrated (b))) ((coyote (b)) (coyote (b)) (rr (a)) (coyote 26286) (rr (a))))

14 + 240 = (433 ((frustrated 26565)) ((coyote 26565) (coyote 26565) (rr (a)) (coyote 26562) (coyote 26563) (coyote 26564) (coyote 26565)))

14 + 242 = (434 ((frustrated 26682)) ((coyote 26682) (coyote 26682) (rr (a)) (coyote 26680) (coyote 26681) (coyote 26682)))

14 + 287 = (435 ((frustrated 28634)) ((coyote 28634) (coyote 28634) (rr (a)) (coyote 28634) (rr (a)) (coyote 28635)))

14 + 288 = (436 ((frustrated 28651)) ((coyote 28651) (coyote 28651) (rr (a)) (coyote 28651) (beep (a))))

14 + 294 = (437 ((frustrated 28806)) ((coyote 28806) (coyote 28806) (rr (a)) (coyote 28806) (rr (a))))

14 + 297 = (438 ((frustrated (b))) ((coyote (b)) (coyote (b)) (rr (a)) (beep (a))))

14 + 300 = (439 ((frustrated (b))) ((coyote (b)) (coyote (b)) (rr (a)) (rr (a))))

14 + 353 = (440 ((frustrated 29866)) ((coyote 29866) (coyote 29866) (rr (a)) (coyote 29865) (coyote 29866)))

14 + 359 = (441 ((frustrated (b))) ((coyote (b)) (coyote (b)) (rr (a)) (coyote 30122)))

14 + 390 = (442 ((frustrated 31126)) ((coyote 31126) (coyote 31126) (rr (a)) (coyote 31126) (coyote 31127)))

14 + 392 = (443 ((frustrated 31160)) ((coyote 31160) (coyote 31160) (rr (a)) (coyote 31160)))

14 + 395 = (444 ((frustrated (b))) ((coyote (b)) (coyote (b)) (rr (a))))

15 + 67 = (445 ((frustrated (b))) ((rr (a)) (rr (a)) (beep (a)) (coyote (b)) (rr (a))))

15 + 71 = (446 ((frustrated (b))) ((rr (a)) (coyote (b)) (rr (a)) (rr (a)) (rr (a))))

15 + 72 = (447 ((frustrated (b))) ((rr (a)) (coyote (b)) (rr (a)) (rr (a)) (coyote 32663)))

15 + 73 = (448 ((frustrated (b))) ((rr (a)) (coyote (b)) (rr (a)) (beep (a))))

15 + 75 = (449 ((frustrated (b))) ((rr (a)) (rr (a)) (coyote (b)) (rr (a))))

15 + 82 = (450 ((frustrated (b))) ((rr (a)) (rr (a)) (beep (a)) (rr (a))))

15 + 85 = (451 ((frustrated (b))) ((rr (a)) (rr (a)) (rr (a)) (rr (a))))

15 + 86 = (452 ((frustrated (b))) ((rr (a)) (rr (a)) (rr (a)) (coyote 32693)))

15 + 87 = (453 ((frustrated (b))) ((rr (a)) (rr (a)) (beep (a))))

15 + 88 = (454 ((frustrated (b))) ((rr (a)) (rr (a)) (rr (a))))

15 + 103 = (455 nil ((coyote (b)) (rr (a)) (rr (a)) (beep (a)) (coyote (b)) (rr (a))))

15 + 107 = (456 nil ((coyote (b)) (rr (a)) (coyote (b)) (rr (a)) (rr (a)) (rr (a))))

15 + 108 = (457 nil ((coyote (b)) (rr (a)) (coyote (b)) (rr (a)) (rr (a)) (coyote 32752)))

15 + 109 = (458 nil ((coyote (b)) (rr (a)) (coyote (b)) (rr (a)) (beep (a))))

15 + 110 = (459 nil ((rr (a)) (coyote (b)) (rr (a)) (coyote (b)) (rr (a))))

15 + 120 = (460 nil ((rr (a)) (rr (a)) (beep (a)) (coyote (b)) (rr (a))))

15 + 124 = (461 nil ((rr (a)) (coyote (b)) (rr (a)) (rr (a)) (rr (a))))

15 + 125 = (462 nil ((rr (a)) (coyote (b)) (rr (a)) (rr (a)) (coyote 32794)))

15 + 126 = (463 nil ((rr (a)) (coyote (b)) (rr (a)) (beep (a))))

15 + 127 = (464 nil ((rr (a)) (rr (a)) (coyote (b)) (rr (a))))

15 + 134 = (465 nil ((rr (a)) (rr (a)) (beep (a)) (rr (a))))

15 + 137 = (466 nil ((rr (a)) (rr (a)) (rr (a)) (rr (a))))

15 + 138 = (467 nil ((rr (a)) (rr (a)) (rr (a)) (coyote 32824)))

15 + 139 = (468 nil ((rr (a)) (rr (a)) (beep (a))))

15 + 140 = (469 nil ((rr (a)) (rr (a)) (rr (a))))

15 + 220 = (470 ((frustrated (b))) ((coyote 33525) (coyote (b)) (rr (a)) (rr (a))))

15 + 221 = (471 ((frustrated (b))) ((coyote 33537) (coyote (b)) (coyote 33538) (beep (a)) (coyote 33539) (coyote (b))))

15 + 223 = (472 ((frustrated (b))) ((coyote 33580) (coyote (b)) (coyote 33581) (beep (a)) (coyote 33582)))

15 + 227 = (473 ((frustrated (b))) ((coyote 33659) (coyote (b)) (coyote 33660) (coyote (b)) (coyote 33661) (coyote 33662)))

15 + 233 = (474 ((frustrated (b))) ((coyote 33745) (rr (a)) (rr (a))))

15 + 235 = (475 nil ((coyote 33764) (coyote (b)) (rr (a)) (coyote (b)) (rr (a))))

15 + 237 = (476 nil ((coyote 33781) (rr (a)) (coyote (b)) (rr (a))))

15 + 239 = (477 nil ((coyote 33796) (rr (a)) (rr (a))))

15 + 282 = (478 ((frustrated (b))) ((coyote 34412) (coyote 34413) (coyote (b)) (coyote 34414) (coyote 34415)))

15 + 299 = (479 ((frustrated (b))) ((coyote (b)) (rr (a)) (beep (a))))

15 + 301 = (480 ((frustrated (b))) ((rr (a)) (coyote (b)) (rr (a))))

15 + 305 = (481 ((frustrated (b))) ((rr (a)) (beep (a))))

15 + 306 = (482 ((frustrated (b))) ((rr (a)) (rr (a))))

15 + 311 = (483 nil ((coyote (b)) (coyote (b)) (rr (a)) (beep (a))))

15 + 312 = (484 nil ((coyote (b)) (rr (a)) (coyote (b)) (rr (a))))

15 + 315 = (485 nil ((coyote (b)) (rr (a)) (beep (a))))

15 + 316 = (486 nil ((rr (a)) (coyote (b)) (rr (a))))

15 + 320 = (487 nil ((rr (a)) (beep (a))))

15 + 321 = (488 nil ((rr (a)) (rr (a))))

15 + 356 = (489 ((frustrated (b))) ((coyote 34777) (coyote (b)) (rr (a))))

15 + 360 = (490 ((frustrated (b))) ((coyote 34821) (rr (a))))

15 + 361 = (491 nil ((coyote 34825) (coyote (b)) (coyote (b)) (rr (a))))

15 + 362 = (492 nil ((coyote 34829) (coyote (b)) (rr (a))))

15 + 363 = (493 nil ((coyote 34833) (rr (a))))

15 + 391 = (494 ((frustrated (b))) ((coyote (b)) (coyote (b)) (beep (a))))

15 + 394 = (495 ((frustrated (b))) ((coyote (b)) (beep (a))))

15 + 396 = (496 ((frustrated (b))) ((coyote (b)) (rr (a))))

15 + 397 = (497 ((frustrated (b))) ((beep (a))))

15 + 398 = (498 ((frustrated (b))) ((rr (a))))

15 + 399 = (499 nil ((coyote (b)) (coyote (b)) (beep (a))))

15 + 400 = (500 nil ((coyote (b)) (coyote (b)) (rr (a))))

15 + 401 = (501 nil ((coyote (b)) (beep (a))))

15 + 402 = (502 nil ((coyote (b)) (rr (a))))

15 + 403 = (503 nil ((beep (a))))

15 + 404 = (504 nil ((rr (a))))

15 + 405 = (505 ((frustrated (b))) ((coyote 35144) (coyote (b)) (coyote (b))))

15 + 406 = (506 ((frustrated (b))) ((coyote 35149) (coyote (b))))

15 + 407 = (507 ((frustrated (b))) ((coyote 35151)))

15 + 408 = (508 nil ((coyote 35154) (coyote (b)) (coyote (b))))
15 + 409 = (509 nil ((coyote 35157) (coyote (b))))
15 + 410 = (510 nil ((coyote 35160)))
15 + 411 = (511 ((frustrated (b))) ((coyote (b)) (coyote (b))))
15 + 412 = (512 ((frustrated (b))) ((coyote (b))))
15 + 413 = (513 ((frustrated (b))) nil)
15 + 414 = (514 nil ((coyote (b)) (coyote (b))))
15 + 415 = (515 nil ((coyote (b))))
15 + 416 = (516 nil nil)
FALSE!

Customs
1 + 3 = (8 ((v (a)) (s (a) (f (a)))) nil)
1 + 5 = (9 ((v (a)) (d (f (a)))) ((e (a))))
1 + 6 = (10 ((s 49 (f 49))) ((e 49) (d 49)))
2 + 3 = (11 ((v (a)) (c (f (a)))) nil)
2 + 6 = (12 ((c (f 89))) ((e 89) (d 89)))
2 + 7 = (13 ((v 100)) ((e 100) (d (f 100))))
3 + 9 = (14 ((v (a)) (d (f (a)))) nil)
3 + 10 = (15 ((s (a) (f (a)))) ((d (a))))
3 + 12 = (16 ((c (f (a)))) ((d (a))))
3 + 13 = (17 ((v (a))) ((d (f (a)))))
4 + 6 = (18 nil ((v (a))))
4 + 7 = (19 nil ((c (a))))
4 + 10 = (20 ((s (a) (f (a)))) ((e (a))))
4 + 12 = (21 ((c (f (a)))) ((e (a))))
4 + 15 = (22 ((s (a) (f (a)))) nil)
4 + 16 = (23 ((c (f (a)))) nil)
5 + 6 = (24 nil ((s (a) 163) (v 163)))
5 + 7 = (25 nil ((s (a) 167) (c 167)))
5 + 10 = (26 ((s 178 (f 178))) ((s (a) 178) (e 178)))
5 + 10 = (27 ((d (f (a)))) ((e (a)) (d (a))))
5 + 12 = (28 ((c (f 186))) ((s (a) 186) (e 186)))
5 + 13 = (29 ((v 192)) ((s (a) (f 192)) (e 192)))
5 + 15 = (30 ((s (a) (f (a)))) ((s (a) (a))))
5 + 15 = (31 ((d (f (a)))) ((d (a))))
5 + 16 = (32 ((c (f (a)))) ((s (a) (a))))
5 + 17 = (33 ((v (a))) ((s (a) (f (a)))))
5 + 20 = (34 ((d (f (a)))) ((e (a))))
5 + 22 = (35 ((d (f (a)))) nil)
5 + 26 = (36 ((d (f (a)))) ((s (a) (a)) (e (a))))
5 + 30 = (37 ((d (f (a)))) ((s (a) (a))))
6 + 9 = (38 ((v (a))) ((v (f (a))) (e (a))))

6 + 13 = (39 nil ((d 279) (e 279) (d (f 279))))
6 + 14 = (40 ((v (a))) ((v (f (a)))))
6 + 17 = (41 nil ((d (a)) (d (f (a)))))
6 + 27 = (42 nil ((v (f (a))) (e (a)) (d (a))))
6 + 29 = (43 nil ((d 311) (s (a) (f 311)) (e 311)))
6 + 31 = (44 nil ((v (f (a))) (d (a))))
6 + 33 = (45 nil ((d (a)) (s (a) (f (a)))))
6 + 34 = (46 nil ((v (f (a))) (e (a))))
6 + 35 = (47 nil ((v (f (a)))))
6 + 36 = (48 nil ((v (f (a))) (s (a) (a)) (e (a))))
6 + 37 = (49 nil ((v (f (a))) (s (a) (a))))
7 + 9 = (50 ((v (a))) ((c (f (a))) (e (a))))
7 + 14 = (51 ((v (a))) ((c (f (a)))))
7 + 21 = (52 nil ((d (f (a))) (e (a))))
7 + 23 = (53 nil ((d (f (a)))))
7 + 27 = (54 nil ((c (f (a))) (e (a)) (d (a))))
7 + 28 = (55 nil ((d (f 383)) (s (a) 383) (e 383)))
7 + 31 = (56 nil ((c (f (a))) (d (a))))
7 + 32 = (57 nil ((d (f (a))) (s (a) (a))))
7 + 34 = (58 nil ((c (f (a))) (e (a))))
7 + 35 = (59 nil ((c (f (a)))))
7 + 36 = (60 nil ((c (f (a))) (s (a) (a)) (e (a))))
7 + 37 = (61 nil ((c (f (a))) (s (a) (a))))
8 + 26 = (62 ((v (a)) (s (f (a)) (f (f (a))))) ((e (f (a)))))
8 + 28 = (63 ((v (a)) (c (f (f (a))))) ((e (f (a)))))
8 + 29 = (64 ((v (a)) (v (a))) ((e (a))))
8 + 33 = (65 ((v (a)) (v (a))) nil)
8 + 43 = (66 ((v (a))) ((d (a)) (e (a))))
8 + 45 = (67 ((v (a))) ((d (a))))
8 + 55 = (68 ((v (a))) ((d (f (f (a)))) (e (f (a)))))
9 + 10 = (69 ((v (a)) (s (f (a)) (f (f (a))))) ((e (a)) (e (f (a)))))
9 + 12 = (70 ((v (a)) (c (f (f (a))))) ((e (a)) (e (f (a)))))
9 + 13 = (71 ((v (a)) (v (a))) ((e (a)) (e (a))))
9 + 39 = (72 ((v (a))) ((e (a)) (e (f (a))) (d (f (f (a))))))
9 + 39 = (73 ((v (a))) ((e (a)) (d (a)) (e (a))))
9 + 43 = (74 ((v (a))) ((e (a)) (s (a) (f (f (a)))) (e (f (a)))))
9 + 52 = (75 ((v (a))) ((e (a)) (e (a))))
9 + 53 = (76 ((v (a))) ((e (a))))
9 + 55 = (77 ((v (a))) ((e (a)) (s (a) (a)) (e (a))))
9 + 57 = (78 ((v (a))) ((e (a)) (s (a) (a))))
10 + 26 = (79 ((s (f (a)) (f (f (a))))) ((e (a)) (d (a)) (e (f (a)))))
10 + 28 = (80 ((c (f (f (a))))) ((e (a)) (d (a)) (e (f (a)))))
10 + 31 = (81 ((s (f (a)) (f (f (a))))) ((e (f (a))) (d (a))))

10 + 34 = (82 ((s (f (a)) (f (f (a))))) ((e (f (a))) (e (a))))
10 + 35 = (83 ((s (f (a)) (f (f (a))))) ((e (f (a)))))
10 + 36 = (84 ((s (f (a)) (f (f (a))))) ((e (f (a))) (s (a) (a)) (e (a))))
10 + 37 = (85 ((s (f (a)) (f (f (a))))) ((e (f (a))) (s (a) (a))))
10 + 43 = (86 nil ((e (a)) (d (a)) (d (a)) (e (a))))
10 + 45 = (87 nil ((e (a)) (d (a)) (d (a))))
10 + 55 = (88 nil ((e (a)) (d (a)) (d (f (f (a)))) (e (f (a)))))
11 + 59 = (89 ((v (a))) nil)
11 + 61 = (90 ((v (a))) ((s (a) (a))))
12 + 31 = (91 ((c (f (f (a))))) ((e (f (a))) (d (a))))
12 + 34 = (92 ((c (f (f (a))))) ((e (f (a))) (e (a))))
12 + 35 = (93 ((c (f (f (a))))) ((e (f (a)))))
12 + 36 = (94 ((c (f (f (a))))) ((e (f (a))) (s (a) (a)) (e (a))))
12 + 37 = (95 ((c (f (f (a))))) ((e (f (a))) (s (a) (a))))
12 + 58 = (96 nil ((e (a)) (d (a)) (e (a))))
12 + 59 = (97 nil ((e (a)) (d (a))))
12 + 60 = (98 nil ((e (a)) (d (a)) (s (a) (a)) (e (a))))
12 + 61 = (99 nil ((e (a)) (d (a)) (s (a) (a))))
13 + 44 = (100 nil ((e (f (a))) (d (f (f (a)))) (d (a))))
13 + 46 = (101 nil ((e (f (a))) (d (f (f (a)))) (e (a))))
13 + 47 = (102 nil ((e (f (a))) (d (f (f (a))))))
13 + 48 = (103 nil ((e (f (a))) (d (f (f (a)))) (s (a) (a)) (e (a))))
13 + 49 = (104 nil ((e (f (a))) (d (f (f (a)))) (s (a) (a))))
14 + 43 = (105 ((v (a))) ((s (a) (f (f (a)))) (e (f (a)))))
15 + 45 = (106 nil ((d (a)) (d (a))))
16 + 59 = (107 nil ((d (a))))
16 + 61 = (108 nil ((d (a)) (s (a) (a))))
18 + 29 = (109 nil ((s (a) (f (a))) (e (a))))
18 + 33 = (110 nil ((s (a) (f (a)))))
18 + 74 = (111 nil ((e (a)) (s (a) (f (f (a)))) (e (f (a)))))
18 + 75 = (112 nil ((e (a)) (e (a))))
18 + 76 = (113 nil ((e (a))))
18 + 77 = (114 nil ((e (a)) (s (a) (a)) (e (a))))
18 + 78 = (115 nil ((e (a)) (s (a) (a))))
18 + 89 = (116 nil nil)
FALSE!

Harmonia
1 + 2 = (8 ((Grandparent 38 36)) ((Parent 39 36) (Mother 38 39)))
1 + 2 = (9 ((Grandparent 40 44)) ((Parent 40 43) (Mother 43 44)))
1 + 3 = (10 ((Grandparent 53 51)) ((Parent 54 51) (Father 53 54)))
1 + 3 = (11 ((Grandparent 55 59)) ((Parent 55 58) (Father 58 59)))
1 + 7 = (12 nil ((Parent 81 80) (Parent 80 (Harmonia))))

2 + 5 = (13 ((Parent (Hera) (Ares))) nil)
2 + 8 = (14 ((Grandparent 207 208)) ((Mother 209 208) (Mother 207 209)))
2 + 10 = (15 ((Grandparent 237 238)) ((Mother 239 238) (Father 237 239)))
2 + 11 = (16 ((Grandparent 252 253)) ((Mother 252 254) (Father 254 253)))
2 + 12 = (17 nil ((Mother 267 268) (Parent 268 (Harmonia))))
2 + 12 = (18 nil ((Mother 272 (Harmonia)) (Parent 271 272)))
2 + 17 = (19 nil ((Mother 327 (Harmonia)) (Mother 326 327)))
2 + 18 = (20 nil ((Mother 335 334) (Mother 334 (Harmonia))))
3 + 4 = (21 ((Parent (Zues) (Ares))) nil)
3 + 6 = (22 ((Parent (Ares) (Harmonia))) nil)
3 + 10 = (23 ((Grandparent 393 394)) ((Father 395 394) (Father 393 395)))
3 + 12 = (24 nil ((Father 423 424) (Parent 424 (Harmonia))))
3 + 12 = (25 nil ((Father 428 (Harmonia)) (Parent 427 428)))
3 + 17 = (26 nil ((Father 483 (Harmonia)) (Mother 482 483)))
3 + 18 = (27 nil ((Father 491 490) (Mother 490 (Harmonia))))
3 + 24 = (28 nil ((Father 534 (Harmonia)) (Father 533 534)))
3 + 25 = (29 nil ((Father 542 541) (Father 541 (Harmonia))))
4 + 10 = (30 ((Grandparent (Zues) 592)) ((Parent (Ares) 592)))
4 + 11 = (31 ((Grandparent 597 (Ares))) ((Parent 597 (Zues))))
4 + 15 = (32 ((Grandparent (Zues) 614)) ((Mother (Ares) 614)))
4 + 16 = (33 ((Grandparent 619 (Ares))) ((Mother 619 (Zues))))
4 + 23 = (34 ((Grandparent 638 (Ares))) ((Father 638 (Zues))))
4 + 23 = (35 ((Grandparent (Zues) 642)) ((Father (Ares) 642)))
4 + 24 = (36 nil ((Parent (Ares) (Harmonia))))
4 + 27 = (37 nil ((Mother (Ares) (Harmonia))))
4 + 28 = (38 nil ((Father (Ares) (Harmonia))))
5 + 8 = (39 ((Grandparent (Hera) 679)) ((Parent (Ares) 679)))
5 + 9 = (40 ((Grandparent 684 (Ares))) ((Parent 684 (Hera))))
5 + 14 = (41 ((Grandparent 703 (Ares))) ((Mother 703 (Hera))))
5 + 14 = (42 ((Grandparent (Hera) 707)) ((Mother (Ares) 707)))
5 + 15 = (43 ((Grandparent 709 (Ares))) ((Father 709 (Hera))))
5 + 16 = (44 ((Grandparent (Hera) 716)) ((Father (Ares) 716)))
6 + 10 = (45 ((Grandparent (Ares) 796)) ((Parent (Harmonia) 796)))
6 + 11 = (46 ((Grandparent 801 (Harmonia))) ((Parent 801 (Ares))))
6 + 15 = (47 ((Grandparent (Ares) 818)) ((Mother (Harmonia) 818)))
6 + 16 = (48 ((Grandparent 823 (Harmonia))) ((Mother 823 (Ares))))
6 + 23 = (49 ((Grandparent 842 (Harmonia))) ((Father 842 (Ares))))
6 + 23 = (50 ((Grandparent (Ares) 846)) ((Father (Harmonia) 846)))
6 + 24 = (51 nil ((Parent (Harmonia) (Harmonia))))
6 + 25 = (52 nil ((Parent 853 (Ares))))
6 + 26 = (53 nil ((Mother 857 (Ares))))
6 + 27 = (54 nil ((Mother (Harmonia) (Harmonia))))
6 + 28 = (55 nil ((Father 865 (Ares))))

6 + 28 = (56 nil ((Father (Harmonia) (Harmonia))))
6 + 35 = (57 ((Grandparent (Zues) (Harmonia))) nil)
6 + 38 = (58 nil nil)
FALSE!

Healthy Kevin
1 + 2 = (6 ((healthy 33)) ((exercises 33) (eatsVegetables 33)))
1 + 4 = (7 ((healthy (kevin))) ((eatsHealthy (kevin))))
1 + 5 = (8 nil ((eatsHealthy 41) (exercises 41)))
2 + 3 = (9 ((eatsHealthy (kevin))) nil)
2 + 7 = (10 ((healthy (kevin))) ((eatsVegetables (kevin))))
2 + 8 = (11 nil ((eatsVegetables 70) (exercises 70)))
3 + 6 = (12 ((healthy (kevin))) ((exercises (kevin))))
3 + 10 = (13 ((healthy (kevin))) nil)
3 + 11 = (14 nil ((exercises (kevin))))
4 + 8 = (15 nil ((eatsHealthy (kevin))))
4 + 11 = (16 nil ((eatsVegetables (kevin))))
4 + 14 = (17 nil nil)
FALSE!