$(0)@$

$(1)\lambda x_1 x_2$

$(2)x_2$

$(3)\lambda z_1 z_2$

$(4)x_1$

$(5)\lambda$

$(6)z_1$

$(7)\lambda s_1 s_2$

$(8)x_1$

$(9)\lambda$

$(10)b$

$(11)\lambda u_1 u_2$

$(12)z_2$

$(13)\lambda$

$(14)s_1$

$(15)\lambda$

$(16)s_2$

$(17)\lambda y_1 y_2$

$(18)y_2$

$(19)\lambda$

$(20)y_1$

$(21)\lambda$

$(22)y_1$

$(23)\lambda y_3$

$(24)y_3$

$(25)\lambda$

$(26)y_3$

$(27)\lambda$

$(28)a$

$(29)\lambda w_1 w_2$

$(30)w_1$

$(31)\lambda v_1 v_2$

$(32)g$

$(33)\lambda$

$(34)v_2$

1. $(0)[ga]\theta_1 = \emptyset$
2. $(1)[ga]\theta_2 = \{((17,23),\theta_1)/1\}$
3. $(2)[ga]\theta_2$
4. $(23)[ga]\theta_3 = \{((3),\theta_2)/23\}$
5. $(24)[ga]\theta_3$
6. $(3)[ga]\theta_4 = \theta_2\{((25,31),\theta_3)/3\}$
7. $(4)[ga]\theta_4$
8. $(17)[ga]\theta_5 = \{((5,7),\theta_4)/17\}$
9. $(18)[ga]\theta_5$
10. $(7)[ga]\theta_6 = \theta_4\{((19,21),\theta_5)/7\}$
11. $(8)[ga]\theta_6$
12. $(17)[ga]\theta_7 = \{((9,11),\theta_6)/17\}$
13. $(18)[ga]\theta_7$
14. $(11)[ga]\theta_8 = \theta_6\{((19,21),\theta_7)/11\}$
15. $(12)[ga]\theta_8$
16. $(31)[ga]\theta_9 = \theta_3\{((13,15),\theta_8)/31\}$
17. $(32)[ga]\theta_9$
18. $(33)[a]\theta_9$
19. $(34)[a]\theta_9$
20. $(15)[a]\theta_8$
21. $(16)[a]\theta_8$
22. $(21)[a]\theta_5$
23. $(22)[a]\theta_5$
24. $(5)[a]\theta_4$
25. $(6)[a]\theta_4$
26. $(25)[a]\theta_3$
27. $(26)[a]\theta_3$
28. $(3)[a]\theta_{10} = \theta_2\{((27,29),\theta_3)/3\}$
29. $(4)[a]\theta_{10}$
30. $(17)[a]\theta_{11} = \{((5,7),\theta_{10})/17\}$
31. $(18)[a]\theta_{11}$
32. $(7)[a]\theta_{13} = \theta_{10}\{((19,21),\theta_{11})/7\}$
33. $(8)[a]\theta_{13}$
34. $(17)[a]\theta_{14} = \{((9,11),\theta_{13})/17\}$
35. $(18)[a]\theta_{14}$
36. $(11)[a]\theta_{15} = \theta_{13}\{((19,21),\theta_{14})/11\}$
37. $(12)[a]\theta_{15}$
38. $(29)[a]\theta_{16} = \theta_3\{((13,15),\theta_{15})/29\}$
39. $(30)[a]\theta_{16}$
40. $(13)[a]\theta_{15}$
41. $(14)[a]\theta_{15}$
42. $(19)[a]\theta_{11}$
43. $(20)[a]\theta_{11}$
44. $(5)[a]\theta_{10}$
45. $(6)[a]\theta_{10}$
46. $(27)[a]\theta_3$
47. $(28)[a]\theta_3$
48. $(28)[\exists]\theta_3$

$(0)@$

$(1)\lambda x_1 x_2$     $(17)\lambda y_1 y_2$     $(23)\lambda y_3$

$(2)x_2$     $(18)y_2$     $(24)y_3$

$(3)\lambda z_1 z_2$     $(19)\lambda$     $(21)\lambda$     $(25)\lambda$     $(31)\lambda v_1 v_2$

$(4)x_1$     $(20)y_1$     $(22)y_1$     $(26)y_3$     $(32)g$

$(5)\lambda$     $(7)\lambda s_1 s_2$     $(27)\lambda$     $(29)\lambda w_1 w_2$     $(33)\lambda$

$(6)z_1$     $(8)x_1$     $(28)a$     $(30)w_1$     $(34)v_2$

$(9)\lambda$     $(11)\lambda u_1 u_2$

$(10)b$     $(12)z_2$

$(13)\lambda$     $(15)\lambda$

$(14a)x_1$     $(16a)x_1$

$(14b)\lambda$     $(14d)\lambda s_1 s_2$     $(16b)\lambda$     $(16d)\lambda s_1 s_2$

$(14c)z_1$     $(14e)s_1$     $(16c)z_1$     $(16e)s_2$