

# DE AANTALLEN KWADRATISCHE HYPERRUIMTEN IN DE RUIMTE VAN VIJF AFMETINGEN

DOOR

**Dr. A. TOXOPEUS.**

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## Combinaties met herhaling van elementen.

In mijne dissertatie behandelde ik de combinaties van de elementen. Nu ga ik de combinaties met herhaling van een element, d. z. de figuren:  $(a\alpha bcd)_{15}$ ,  $(ab\beta cd)_{15}$ ,  $(a\alpha bcd e)_{16}$ ,  $(ab\beta cde)_{16}$ ,  $(ab\gamma cd e)_{16}$ ,  $(ab\gamma cd \delta e)_{16}$ ,  $(ab\gamma cd \delta e \epsilon)_{16}$  geven, waar  $\alpha$ ,  $\beta$ ,  $\gamma$ ,  $\delta$ ,  $\epsilon$  achtereenvolgens een tweede punt, een tweede lijn, een tweede vlak, een tweede ruimte en een tweede hyperruimte aanwijzen.

$$\alpha) \quad (a\alpha b)_{10}$$

Met behulp van de formules van  $B)$   $a_1)$  verkrijgt men:

$$\begin{aligned} a^2 &= ab - b_e; \quad a^3 = ab_c - b_i, \quad a^2 \alpha = a\alpha b - \\ &- \alpha b_e; \quad a^4 = ab_b - b_o, \quad a^3 \alpha = a\alpha b_c - ab_i, \quad a^2 \alpha^2 = a\alpha(b_c + b_e) - \\ &- (a + \alpha) b_i + b_d; \quad \text{enz.} \end{aligned}$$

Daar wij een eindig aantal figuren beschouwen, geeft de term met  $a\alpha$  aan, wat wij moeten hebben, want de andere termen zouden aan  $b$  meer dan 8 voorwaarden opleggen. Noemen wij  $\mu_i$  het aantal voorwaarden, waaraan  $b$  moet voldoen, dan verkrijgen wij:

$$\begin{aligned} a^2 \alpha \mu_7 &= a\alpha b \mu_7, \quad a^3 \alpha \mu_6 = a\alpha b_c \mu_6, \quad a^2 \alpha^2 \mu_6 = a\alpha(b_c + b_e) \mu_6, \\ a^4 \alpha \mu_5 &= a\alpha b_b \mu_5, \quad a^3 \alpha^2 \mu_5 = a\alpha(b_b + b_i) \mu_5, \quad a^5 \alpha \mu_4 = a\alpha b_a \mu_4, \\ a^4 \alpha^2 \mu_4 &= a\alpha(b_a + b_o) \mu_4, \quad a^3 \alpha^3 \mu_4 = a\alpha(b_a + b_u + b_o) \mu_4, \\ a^5 a^2 \mu_3 &= a\alpha b_u \mu_3, \quad a^4 \alpha^3 \mu_3 = a\alpha(b_m + b_u) \mu_3, \quad a^5 \alpha^3 \mu_2 = a\alpha b_n \mu_2, \\ a^4 \alpha^4 \mu_2 &= a\alpha(b_k + b_n) \mu_2, \quad a^5 \alpha^4 \mu_1 = a\alpha b_s \mu_1, \quad a^5 \alpha^5 = a\alpha B. \end{aligned}$$

Nu kan men de figuren  $a^{p_1} \alpha^{p_2} b^q$  berekenen waar  $p_1 + p_2 + q = 10$ ,  
 b. v.  $a^4 \alpha^3 b^3 = a \alpha (b_m + b_u) b^3 = a \alpha (b^3 b_m + b^3 b_u) = 3 a \alpha B$ .  
 En evenzoo  $a^p b^q$ , waar  $p = p_1 + p_2$ ; b. v.  $a^7 b^3 = \frac{7}{1 \cdot 2} \cdot (a^5 \alpha^2 b^3)$   
 $+ \frac{7 \cdot 6 \cdot 5}{1 \cdot 2 \cdot 3} (a^4 \alpha^3 b^3) = 21 \cdot 1 + 35 \cdot 3 = 126$ .

Evenzoo vindt men de figuren  $a^{p_1} \alpha^{p_2} b^q c^r$ , waar  $p_1 + p_2 + q + r = 13$ ,  
 met behulp van deze uitkomsten en die van  $B(a_1)$ . En daarna de  
 aantallen  $a^p b^q c^r$ , waar  $p + q + r = 13$ ; de aantallen  $a^{p_1} \alpha^{p_2} b^q c^r d^s$ ,  
 waar  $p_1 + p_2 + q + r + s = 15$ , de aantallen  $a^p b^q c^r d^s$ , waar  
 $p + q + r + s = 15$ ; de aantallen  $a^{p_1} \alpha^{p_2} b^q c^r d^s e^t$ , waar  $p_1 + p_2 +$   
 $+ r + s + t = 16$  en de aantallen  $a^p b^q c^r d^s e^t$ , waar  $p + q +$   
 $+ r + s + t = 16$ .

De aantallen  $(a \alpha b c d e)_{16}$  zijn ook uit  $(a \alpha b c d)_{15}$  af te leiden  
 met behulp van de formules:

$$(a^{p_1} \alpha^{p_2} b^q c^r d^s e)_{16} = (a^{p_1} \alpha^{p_2} b^q c^r d^s)_{16}, \quad \text{waar } p + q + r + s = 15; \\ (a^{p_1} \alpha^{p_2} b^q c^r d^s e^2)_{16} = (a^{p_1} \alpha^{p_2} b^q c^r d^{s+1})_{15}, \quad \text{waar } p + q + r + s = 14; \\ (a^{p_1} \alpha^{p_2} b^q c^r d^s e^3)_{16} = (a^{p_1} \alpha^{p_2} b^q c^r d^s d_c)_{15}, \quad \text{waar } p + q + r + s = 13; \\ (a^{p_1} \alpha^{p_2} b^q c^r d^s e^4) = (a^{p_1} \alpha^{p_2} b^q c^r d^s d_a)_{15}, \quad \text{waar } p + q + r + s = 12; \\ (a^{p_1} \alpha^{p_2} b^q c^r d^s e^5)_{16} = (a^{p_1} \alpha^{p_2} b^q c^r d^s d_e)_{15}, \quad \text{waar } p + q + r + s = 11.$$

Ik laat deze hulpaantallen hier weg, maar geef de formules die  
 mij tot controle dienden:

$$(550) = (541) = (532) = (523) = (514) = B \\ (540) = (531) = (522) = (513) = b_s \\ (530) = (521) = (512) = b_u,$$

waar de figuur  $(a^{p_1} \alpha^{p_2} b^q)_{10}$  of  $(p_1 p_2 q)_{10}$  beschouwd is. En evenzoo:

$$(550) = \frac{1}{2} (442) = \frac{1}{3} (433) = \frac{1}{4} (424) = \frac{1}{4} (415) = \frac{1}{6} (334) = \\ = \frac{1}{9} (325) = \frac{1}{9} (316) = \frac{1}{4} (226) = \frac{1}{4} (216) = \frac{1}{4} (118) = B; \\ (540) = \frac{1}{2} (441) = \frac{1}{3} (432) = \frac{1}{4} (423) = \frac{1}{4} (414) = \frac{1}{6} (333) = \\ = \frac{1}{9} (324) = \frac{1}{9} (315) = \frac{1}{4} (225) = \frac{1}{4} (216) = \frac{1}{4} (117) = b_s.$$

$$(431) = (440 + (521)); \quad 431 = \frac{1}{2} (332) = \frac{1}{3} (323) = \frac{1}{3} (314); \\ (430) = \frac{1}{2} (331) = \frac{1}{3} (322) = \frac{1}{3} (313); \\ (521) + (431) = (422) + (413); \quad (520) + (430) = (421) = (412); \\ (420) = (411); \quad (321) = (312); \quad (320) = (311); \\ 5 (431) - (521) = (224) = (215) = (116); \\ 5 (430) - (520) = (223) = (214) = (115); \\ 2 (321) - (411) = (222) = (213) = (114); \\ 2 (320) - (410) = (221) = (212) = (113); \\ (220) = (211) = (112); \quad (210) = (111).$$

$$\beta) \quad (\alpha b \beta c)_{14}$$

Na deze aantallen geven wij aan, hoe men de aantallen  $(\alpha b c \beta d)_{15}$  kan vinden met behulp van de tabel voor  $(\alpha c d)_{13}$ . Hiervoor moet men eerst de reductieformules voor  $b^{n_1} \beta^{n_2}$  afleiden.

Wij hebben vroeger gevonden:

$$\begin{aligned} b^2 &= b(a+c) - (a^2 + c_d); \\ \text{dus } b^2 \beta &= b \beta(a+c) - \beta(a^2 + c_d). \end{aligned}$$

Als wij nu in  $b^{n_1} \beta^{n_2} b^2$  en evenzoo  $\beta^2$  gaan vervangen door hare waarden, vindt men:

$$\begin{aligned} b^2 \beta^2 &= b \beta(a+c)^2 - (b+\beta)(a+c)(a^2 + c_d) + (a^2 + c_d)^2, \\ \dots, b^7 \beta^6 &= b \beta(a+c) \{ [2c_b - (a-c)^2] - (a^2 + c_d)(2ac + c_b) \} \\ &\quad \times \{ (a+c)^2 [2c_b - (a-c)^2] - (a^2 + c_d)(2ac + c_b) \} - \\ &\quad - (a^2 + c_d) \{ (a+c)^2 [2c_b - (a-c)^2] - (a^2 + c_d)(2ac + c_b) \} > - \\ &\quad - b(a^2 + c_d) \{ (a+c)^2 [2c_b - (a-c)^2] - (a^2 + c_d)(2ac + c_b) \} \times \\ &\quad \times \{ (a+c)^2 [2ac + c_b - 2(a^2 + c_d)] - \\ &\quad - (a^2 + c_d) \{ (a+c)^2 [2c_b - (a-c)^2] - (a^2 + c_d)(2ac + c_b) \} > - \\ &\quad - \beta(a+c)^2 (a^2 + c_d)(2ac + c_b) [2ac + c_b - 2(a^2 + c_d)] \times \\ &\quad \times \{ [2c_b - (a-c)^2]^2 - (a^2 + c_d)(2ac + c_b) \} + \\ &\quad + (a+c)(a^2 + c_d)^2 (2ac + c_b) [2ac + c_b - 2(a^2 + c_d)] \times \\ &\quad \times \{ (a+c)^2 [2c_b - (a-c)^2] - (a^2 + c_d)(2ac + c_b) \}. \end{aligned}$$

Daar wij later een eindig aantal figuren beschouwen, hebben wij slechts den term met  $b\beta$  te nemen. Als  $\mu_i$  een aantal voorwaarden aanduidt, waaraan het punt  $a$  en het vlak  $c$  moeten voldoen, dan verkrijgen wij na herleiding met behulp van de formules voor het vlak  $c$ :

$$\begin{aligned} b^2 \beta \mu_{10} &= b \beta(a+c) \mu_{10}; \\ b^3 \beta \mu_9 &= b \beta(2ac + c_b) \mu_9; \\ b^2 \beta^2 \mu_9 &= b \beta(a^2 + 2ac + c_b + c_d) \mu_9; \\ b^4 \beta \mu_8 &= b \beta(-a^3 + a^2c + 3ac_b + ac_d + c_a - c_e) \mu_8; \\ b^3 \beta^2 \mu_8 &= b \beta(2a^2c + 3ac_b + 2ac_d + c_a + c_m) \mu_8; \\ b^5 \beta \mu_7 &= b \beta(-a^4 - 2a^3c + 3a^2c_b + 2a^2c_d + 4ac_a - \\ &\quad - 2ac_e + 2ac_m - 2c_f) \mu_7; \\ b^4 \beta^2 \mu_7 &= b \beta(-a^4 + 4a^2c_b + 2a^2c_d + 4ac_a + 4ac_m + \\ &\quad + c_k - c_l) \mu_7; \\ b^3 \beta^3 \mu_7 &= b \beta(4a^2c_b + 4a^2c_d + 4ac_a + 4ac_m + c_k) \mu_7; \\ b^6 \beta \mu_6 &= b \beta(-4a^4c - 2a^3c_b + 6a^2c_d + 6a^2c_m - 2ac_f - \\ &\quad - 3ac_k + 3ac_l - ac_v - c_g - 3c_t) \mu_6; \\ b^5 \beta^2 \mu_6 &= b \beta(-A - 3a^4c + a^3c_b + 7a^2c_a + 7a^2c_m + ac_f + \\ &\quad + 5ac_k - 3ac_l + ac_v - 2c_g - 2c_t) \mu_6; \end{aligned}$$

$$\begin{aligned}
b^4 \beta^3 \mu_6 &= b \beta (-2 a^4 c + a^3 c_b + 2 a^3 c_d + 7 a^2 c_a + 2 a^2 c_e + \\
&\quad + 9 a^2 c_m + a c_f + 5 a c_k - 2 a c_l + a c_v + c_h - c_i) \mu_6; \\
b^7 \beta \mu_5 &= b \beta (-2 A c - 9 a^4 c_b - 5 a^4 c_d + 4 a^3 c_e + 4 a^3 c_m + \\
&\quad + 2 a^2 c_f + 10 a^2 c_k - 5 a^2 c_l + 2 a^2 c_v - 6 a c_g + \\
&\quad + 2 a c_h - 12 a c_t + c_i - 2 c_n) \mu_5; \\
b^6 \beta^2 \mu_5 &= b \beta (-4 A c - 6 a^4 c_b - 4 a^4 c_d + 4 a^3 c_a + 4 a^3 c_m + \\
&\quad + 4 a^2 c_f + 11 a^2 c_k - 4 a^2 c_l + 4 a^2 c_v - 6 a c_g + \\
&\quad + 4 a c_h - 6 a c_t - c_i - 4 c_n) \mu_5; \\
b^5 \beta^3 \mu_5 &= b \beta (-2 A c - 5 a^4 c_b - 4 a^4 c_d + 4 a^3 c_a + 4 a^3 c_e + \\
&\quad + 8 a^3 c_m + 6 a^2 c_f + 11 a^2 c_k - 4 a^2 c_l + 6 a^2 c_v - \\
&\quad - 2 a c_g + 6 a c_h - 4 a c_t - 2 c_n) \mu_5; \\
b^4 \beta^4 \mu_5 &= b \beta (-2 A c - 5 a^4 c_b - a^4 c_d + 4 a^3 c_a + 4 a^3 c_e + \\
&\quad + 8 a^3 c_m + 4 a^2 c_f + 9 a^2 c_k + a^2 c_l + 8 a^2 c_v - \\
&\quad - 2 a c_g + 6 a c_h - 4 a c_t + c_i + c_j) \mu_5; \\
b^8 \beta \mu_4 &= b \beta (-9 A c_b - 7 A c_d - 15 a^4 c_a + 3 a^4 c_e - 12 a^4 c_m + \\
&\quad + 10 a^3 c_f + 5 a^3 c_k + 3 a^3 c_l + 10 a^3 c_v - 9 a^2 c_g + \\
&\quad 13 a^2 c_h - 12 a^2 c_t + a c_i + a c_j - 16 a c_n + 3 c_p - \\
&\quad - c_q) \mu_4; \\
b^7 \beta^2 \mu_4 &= b \beta (-11 A c_b - 7 A c_d - 9 a^4 c_a - a^4 c_e - 10 a^4 c_m + \\
&\quad + 6 a^3 c_f + 10 a^3 c_k - a^3 c_l + 6 a^3 c_v - 4 a^2 c_g + \\
&\quad + 19 a^2 c_h - 3 a^2 c_t - 5 a c_i + 2 a c_j - 18 a c_n - \\
&\quad - c_p - 2 c_q) \mu_4; \\
b^6 \beta^3 \mu_4 &= b \beta (-8 A c_b - 8 A c_d - 8 a^4 c_a - 8 a^4 c_m + 12 a^2 c_f + \\
&\quad + 10 a^3 c_k + 12 a^3 c_v - 4 a^2 c_g + 20 a^2 c_h - a c_i + \\
&\quad + 3 a c_j - 10 a c_n - c_p - 3 c_q) \mu_4; \\
b^5 \beta^4 \mu_4 &= b \beta (-8 A c_b - 5 A c_d - 8 a^4 c_a + 3 a^4 c_e - 5 a^4 c_m + \\
&\quad + 12 a^3 c_f + 10 a^3 c_k + 3 a^3 c_l + 12 a^3 c_v + 2 a^2 c_g + \\
&\quad + 23 a^2 c_h + 3 a^2 c_t + 4 a c_j - 8 a c_n + 2 c_p) \mu_4; \\
b^8 \beta^2 \mu_3 &= b \beta (-24 A c_a - 4 A c_e - 28 A c_m - 2 a^4 c_f - \\
&\quad - 10 a^4 c_k + 6 a^4 c_l - 2 a^4 c_v + 12 a^3 c_g + 36 a^3 c_h + \\
&\quad + 16 a^3 c_t - 8 a^2 c_i + 14 a^2 c_j - 24 a^2 c_n - 12 a c_p - \\
&\quad - 16 a c_q + 2 c_s) \mu_3; \\
b^7 \beta^3 \mu_3 &= b \beta (-20 A c_a - 10 A c_e - 30 A c_m + 3 a^4 c_f - \\
&\quad - 9 a^4 c_k + 8 a^4 c_l + 3 a^4 c_v + 8 a^3 c_g + 38 a^3 c_h + \\
&\quad + 26 a^3 c_t - 7 a^2 c_i + 16 a^2 c_j - 18 a^2 c_n - 6 a c_p - \\
&\quad - 14 a c_q - 2 c_s) \mu_3; \\
b^6 \beta^4 \mu_3 &= b \beta (-20 A c_a - 4 A c_e - 24 A c_m + 6 a^4 c_f - 9 a^4 c_k + \\
&\quad + 8 a^4 c_l + 6 a^4 c_v + 20 a^3 c_g + 44 a^3 c_h + 32 a^3 c_t - \\
&\quad - 4 a^2 c_i + 16 a^2 c_j - 12 a^2 c_n - 8 a c_q + c_s) \mu_3; \\
b^5 \beta^5 \mu_3 &= b \beta (-20 A c_a - 24 A c_m + 6 a^4 c_f - 9 a^4 c_k + \\
&\quad + 14 a^4 c_l + 6 a^4 c_v + 20 a^3 c_g + 44 a^3 c_h + 32 a^3 c_t + \\
&\quad + 20 a^2 c_j - 4 a^2 c_n - 8 c_q + 4 c_s) \mu_3;
\end{aligned}$$

$$\begin{aligned}
b^8 \beta^3 \mu_2 &= b\beta(-31Ac_r - 39Ac_k + 6Ac_t - 31Ac_v + 30a^4c_g + \\
&\quad + 19a^4c_h + 47a^4c_i - 10a^3c_i + 41a^3c_j + 20a^3c_n - \\
&\quad - 26a^2c_p - 29a^2c_q - 11ac_s - C)\mu_2; \\
b^7 \beta^4 \mu_2 &= b\beta(-22Ac_r - 39Ac_k - 6Ac_t - 22Ac_v + 33a^4c_g + \\
&\quad + 22a^4c_h + 53a^4c_i + a^3c_i + 43a^3c_j + 42a^3c_n - \\
&\quad - 23a^2c_p - 29a^2c_q + ac_s - C)\mu_2; \\
b^6 \beta^5 \mu_2 &= b\beta(-22Ac_r - 39Ac_k + 12Ac_t - 22Ac_v + \\
&\quad + 45a^4c_g + 28a^4c_h + 59a^4c_i + 5a^3c_i + 47a^3c_j + \\
&\quad + 50a^3c_n - 11a^2c_p - 17a^2c_q + 4ac_s + 2C)\mu_2; \\
b^8 \beta^4 \mu_1 &= b\beta(-26Ac_g - 66Ac_h - 36Ac_t + 24a^4c_i + \\
&\quad + 50a^4c_j + 152a^4c_n - 32a^3c_p - 36a^2c_s)\mu_1; \\
b^7 \beta^5 \mu_1 &= b\beta(+16Ac_g - 80Ac_h + 30a^4c_i + 50a^4c_j + \\
&\quad + 164a^4c_n - 8a^3c_p + 24a^3c_q - 24a^2c_s + 6aC)\mu_1; \\
b^6 \beta^6 \mu_1 &= b\beta(16Ac_g - 80Ac_h + 40a^4c_i + 60a^4c_j + 184a^4c_n - \\
&\quad - 8a^3c_p + 24a^3c_q - 9a^2c_s + 6aC)\mu_1; \\
b^8 \beta^5 \mu_0 &= b\beta(51Ac_i - 50Ac_j + 128Ac_n + 93a^4c_p + \\
&\quad + 182a^4c_q - 67a^3c_s - 9a^2C)\mu_0; \\
b^7 \beta^6 \mu_0 &= b\beta(61Ac_i - 40Ac_j + 168Ac_n + 123a^4c_p + \\
&\quad + 212a^4c_q - 52a^3c_s + 6a^2C)\mu_0.
\end{aligned}$$

Met behulp van deze formules zijn nu de aantallen  $(\alpha b \beta c)_{13}$  berekend, terwijl daarbij de tabel voor  $(\alpha c)_{11}$  en de formules voor  $c$  gebruikt zijn, b. v.:

$$\begin{aligned}
(a^2b^5\beta^3c^3) &= (2533) = a^2c^3 \cdot b\beta[-2Ac - 5a^4c_b - 4a^4c_d + \\
&\quad + 4a^3c_a + 4a^3c_e + 8a^3c_m + 6a^2c_f + 11a^2c_k - 4a^2c_l + \\
&\quad + 6a^2c_o - 2ac_g + 6ac_h - 4ac_t - 2c_n] = b\beta[0 + 0 + 0 + \\
&\quad + 4A(c_j + 2c_n) + 4A(c_i + 2c_n) + 8A(2c_i + 2c_j + 6c_n) + \\
&\quad + 6a^4(3c_p + 2c_q) + 11a^4(5c_p + 6c_q) - 4a^4(6c_p + 5c_q) + \\
&\quad + 6a^4(2c_p + 3c_q) - 2a^3 \cdot 3c_s + 6a^3 \cdot 3c_s - 4a^3 \cdot 2c_s - \\
&\quad - 2a^2 \cdot 2C] = b\beta[0 + 0 + 0 + 4(1 + 0) + 4(0 + 0) + \\
&\quad + 8(0 + 2 + 0) + 6(0 + 2) + 11(0 + 6) - 4(0 + 5) + \\
&\quad + 6(0 + 3) - 6 + 18 - 8 - 4] = 96.
\end{aligned}$$

Uit de aantallen  $(pq_1q_2r)_{13}$  vindt men de aantallen  $(pq'r)_{13}$  met behulp van de binominaalcoefficiënten. Evenzoo bepaalt men de aantallen  $(pq_1q_2rs)_{15}$  met behulp van de tabel voor  $(\alpha c d)_{13}$  en hieruit  $(pqrs)_{15}$ . En overeenkomstig de aantallen  $(pq_1q_2rs t)_{16}$  met de tabel voor  $(\alpha c d e)_{14}$  en hieruit de aantallen  $(pqrs t)_{16}$ . Men kan de aantallen  $(pq_1q_2rs t)_{16}$  berekenen met behulp van de reductieformules:

$$\begin{aligned}
 a^p b^{q_1} \beta^{q_2} c^r d^s e &= a^p b^{q_1} \beta^{q_2} c^r d^s \dots p + q_1 + q_2 + r + s = 15, \\
 a^p b^{q_1} \beta^{q_2} c^r d^s e^2 &= a^p b^{q_1} \beta^{q_2} c^r d^{s+1} \dots p + q_1 + q_2 + r + s = 14, \\
 a^p b^{q_1} \beta^{q_2} c^r d^s e^3 &= a^p b^{q_1} \beta^{q_2} c^r d^s d_c \dots p + q_1 + q_2 + r + s = 13, \\
 a^p b^{q_1} \beta^{q_2} c^r d^s e^4 &= a^p b^{q_1} \beta^{q_2} c^r d^s d_u \dots p + q_1 + q_2 + r + s = 12, \\
 a^p b^{q_1} \beta^{q_2} c^r d^s E &= a^p b^{q_1} \beta^{q_2} c^r d^s d_e \dots p + q_1 + q_2 + r + s = 11.
 \end{aligned}$$

Ik laat de hulpaantallen hier weg.

$$\gamma) (a b c \gamma d)_{15}.$$

Voor de aantallen  $(a^p b^q c^{r_1} \gamma^{r_2} d^s) = (p q r_1 r_2 s)$ ,  $(a^p b^q c^{r_1} \gamma^{r_2} d^s c^t) = (p q r_1 r_2 s t)$  heeft men reductieformules voor  $c^{r_1} \gamma^{r_2}$  noodig.  
Daartoe gebruiken wij de betrekkingen:

$$c^2 = c_b + c_d, \quad b c = b_c + c_d, \quad c d = c_b + d_c.$$

Met behulp hiervan vinden wij:

$$\begin{aligned}
 c^2 &= c_b + c_d = c d - d_c + b c - b_c = (b + d) c - (b_c + d_c) \\
 c^2 \gamma &= c \gamma (b + d) - \gamma (b_c + d_c); c^3 \gamma = c^2 \gamma (b + d) - c \gamma (b_c + d_c) = \\
 &= \gamma (b + d) [(b + d) c - (b_c + d_c)] - c \gamma (b_c + d_c) = c \gamma (2 b d + \\
 &+ b_e + d_a) - \gamma (b + d) (b_c + d_c); c^2 \gamma^2 = c (b + d) [(b + d) \gamma - \\
 &- (b_c + d_c)] - (b_c + d_c) [(b + d) \gamma - (b_c + d_c)], \text{ enz.}
 \end{aligned}$$

$$\begin{aligned}
 c^6 \gamma^4 &= c \gamma (2 B + 4 b_s d - 4 b_k d_a - 4 b_k d_c - 42 b_n d_o - 36 b_n d_c + \\
 &+ 20 b_m d_u + 28 b_m d_i - 48 b_u d_i - b_a d_b + 8 b_a d_e + 14 b_a d_o + \\
 &+ 60 b_a d_b - b_d d_e + 55 b_d d_o + 55 b_o d_b + 14 b_o d_e + 72 b_o d_o + \\
 &+ 20 b_b d_m + 28 b_i d_m - 48 b_i d_u - 4 b_c d_k - 36 b_c d_u - 4 b_e d_k - \\
 &- 42 b_e d_n + 4 b d_s + 2 D) - c (-12 B d - 27 b_s d_u - 25 b_s d_c + \\
 &+ 11 b_k d_d + 23 b_k d_i + 10 b_n d_d + 41 b_n d_i + 43 b_m d_b - 12 b_m d_c + \\
 &+ 29 b_m d_o + 27 b_u d_b - 28 b_u d_e - 8 b_u d_o - 16 b_a d_m - 28 b_a d_u + \\
 &+ 43 b_d d_m + 27 b_d d_u + 29 b_o d_m + 36 b_o d_u + 11 b_b d_k + 10 b_b d_n + \\
 &+ 23 b_i d_k + 41 b_i d_n - 25 b_c d_s - 27 b_e d_s - 12 b D) - \gamma (-9 B d - \\
 &- 27 b_s d_u - 9 b_s d_c + 15 b_k d_d + 27 b_k d_i + 18 b_n d_d + 53 b_n d_i + \\
 &+ 55 b_m d_b + 41 b_m d_o + 39 b_u d_b - 16 b_u d_e + 4 b_u d_o - 16 b_a d_u + \\
 &+ 55 b_d d_m + 39 b_d d_u + 41 b_o d_m + 4 b_o d_u + 15 b_b d_k + 18 b_b d_n + \\
 &+ 27 b_i d_k + 53 b_i d_n - 9 b_c d_s - 27 b_e d_s - 9 b D) + (6 B d_u + \\
 &+ B d_c + 4 b_s d_d + 60 b_s d_i + 21 b_k d_b - 5 b_k d_e + 9 b_k d_o + \\
 &+ 39 b_n d_b - 9 b_n d_c + 27 b_n d_o + 96 b_m d_m + 84 b_m d_u + 84 b_u d_m + \\
 &+ 72 b_u d_u - 5 b_a d_k - 9 b_a d_n + 21 b_d d_k + 39 b_d d_n + 9 b_o d_k + \\
 &+ 27 b_o d_n + 4 b_b d_s + 60 b_i d_s + b_c D + 6 b_e D), \text{ enz.}
 \end{aligned}$$

Ik geef terstond de formules, zooals die bruikbaar zijn en na een lange herleiding te verkrijgen zijn met de formules voor  $b$  en  $d$ ; d. z.:

$$c^2 \gamma \mu_{11} = c \gamma (b + d) \mu_{11};$$

$$\begin{aligned}
c^3 \gamma \mu_{10} &= c \gamma (b_e + 2 b d + d_a) \mu_{10}; \\
c^2 \gamma^2 \mu_{10} &= c \gamma (b_c + b_e + 2 b d + d_a + d_c) \mu_{10}; \\
c^4 \gamma \mu_9 &= c \gamma (-b_b + b_c d + 3 b_e d + 3 b d_a + b d_c - d_d) \mu_9; \\
c^3 \gamma^2 \mu_9 &= c \gamma (b_i + 2 b_c d + 3 b_e d + 3 b d_a + 2 b d_c + d_i) \mu_9; \\
c^5 \gamma \mu_8 &= c \gamma (-b_a - 2 b_o - 2 b_b d + 2 b_i d + 3 b_c d_a + 2 b_e d_c + \\
&\quad + 6 b_e d_a + 3 b_e d_c - 2 b d_d + 2 b d_i - d_e - 2 d_o) \mu_8; \\
c^4 \gamma^2 \mu_8 &= c \gamma (-b_a - b_o + 4 b_i d + 4 b_c d_a + 2 b_c d_c + 6 b_e d_a + \\
&\quad + 4 b_e d_c + 4 b d_i - d_e - d_o) \mu_8; \\
c^3 \gamma^3 \mu_8 &= c \gamma (b_d + 4 b_i d + 4 b_c d_a + 4 b_c d_c + 6 b_e d_a + 4 b_e d_c + \\
&\quad + 4 b d_i + d_b) \mu_8; \\
c^6 \gamma \mu_7 &= c \gamma (-b_m - 2 b_u - 4 b_a d + b_u d - 6 b_o d - 2 b_b d_a + \\
&\quad + 8 b_i d_a + 6 b_i d_c + 6 b_c d_i - 2 b_e d_a + 8 b_e d_i + \\
&\quad + b d_v - 4 b d_e - 6 b d_o - d_m - 2 d_u) \mu_7; \\
c^5 \gamma^2 \mu_7 &= c \gamma (-2 b_m - 3 b_u - 3 b_a d + 2 b_a d - 2 b_o d + b_b d_a + \\
&\quad + 11 b_i d_a + 7 b_i d_c + 7 b_c d_i + b_e d_a + 11 b_e d_i + \\
&\quad + 2 b d_v - 3 b d_e - 2 b d_o - 2 d_m - 3 d_u) \mu_7; \\
c^4 \gamma^3 \mu_7 &= c \gamma (-b_u - 2 b_a d + 3 b_a d - b_o d + b_b d_a + 2 b_b d_c + \\
&\quad + 11 b_i d_a + 9 b_i d_c + 2 b_c d_a + 9 b_c d_i + b_e d_a + \\
&\quad + 11 b_e d_i + 3 b d_v - 2 b d_e - b d_o - d_u) \mu_7; \\
c^7 \gamma \mu_6 &= c \gamma (b_k - 6 b_m d - 12 b_u d - 9 b_a d_a - 5 b_a d_c + 6 b_a d_a + \\
&\quad + 5 b_u d_c - 9 b_o d_a - 3 b_o d_c + 4 b_b d_d + 4 b_b d_i + \\
&\quad + 4 b_i d_a + 24 b_i d_i + 5 b_c d_b - 5 b_c d_e - 3 b_c d_o + \\
&\quad + 6 b_e d_b - 9 b_e d_e - 9 b_e d_o - 6 b d_m - 12 b d_u + d_k) \mu_6; \\
c^6 \gamma^2 \mu_6 &= c \gamma (-b_k - 3 b_n - 6 b_m d - 12 b_u d - 6 b_a d_a - \\
&\quad - 4 b_a d_c + 9 b_u d_a + 7 b_d d_c + 4 b_b d_i + 4 b_i d_d + \\
&\quad + 28 b_i d_i + 7 b_c d_b - 4 b_c d_e + 9 b_e d_b - 6 b_e d_e - \\
&\quad - 6 b d_m - 12 b d_u - d_k - 3 d_n) \mu_6; \\
c^5 \gamma^3 \mu_6 &= c \gamma (-2 b_n - 2 b_m d - 8 b_u d - 5 b_a d_a - 4 b_a d_c + \\
&\quad + 10 b_u d_a + 7 b_d d_c + b_o d_a + 2 b_o d_c + 4 b_b d_i + \\
&\quad + 8 b_b d_i + 8 b_i d_a + 32 b_i d_i + 7 b_c d_b - 4 b_c d_c + \\
&\quad + 2 b_c d_o + 10 b_e d_b - 5 b_e d_c + b_e d_o - 2 b d_m - 8 b d_u - \\
&\quad - 2 d_n) \mu_6; \\
c^4 \gamma^4 \mu_6 &= c \gamma (b_k + b_n - 2 b_m d - 8 b_u d - 5 b_a d_a - b_a d_c + \\
&\quad + 10 b_u d_a + 10 b_d d_c + b_o d_a + 5 b_o d_c + 4 b_b d_d + \\
&\quad + 8 b_b d_i + 8 b_i d_a + 32 b_i d_i + 10 b_c d_b - b_c d_c + \\
&\quad + 5 b_c d_o + 10 b_e d_b - 5 b_e d_c + b_e d_o - 2 b d_m - 8 b d_u + \\
&\quad + d_k + d_n) \mu_6. \\
c^8 \gamma \mu_5 &= c \gamma (4 b_s + b_k d - 9 b_n d - 15 b_m d_a - 9 b_m d_c - 36 b_u d_a - \\
&\quad - 24 b_u d_c + 3 b_a d_a - 12 b_a d_i + 8 b_d d_a + 28 b_d d_i +
\end{aligned}$$

$$\begin{aligned}
& + 13 b_o d_a + 8 b_o d_i + 8 b_b d_b + 3 b_b d_e + 13 b_b d_o + \\
& + 28 b_i d_b - 12 b_i d_e + 8 b_i d_o - 9 b_c d_m - 24 b_c d_u - \\
& - 15 b_e d_m - 36 b_e d_u + b d_k - 9 b d_n + 4 d_s) \mu_5;
\end{aligned}$$

$$\begin{aligned}
c^7 \gamma^2 \mu_5 = & c \gamma (b_s - 5 b_k d - 18 b_n d - 9 b_m d_a - 4 b_m d_c - \\
& - 30 b_u d_a - 20 b_u d_c - b_a d_d - 10 b_a d_i + 9 b_d d_d + \\
& + 35 b_d d_i + 5 b_o d_d + 16 b_o d_i + 9 b_b d_b - b_b d_e + \\
& + 5 b_b d_o + 35 b_i d_b - 10 b_i d_e + 16 b_i d_o - 4 b_c d_m - \\
& - 20 b_c d_u - 9 b_e d_m - 30 b_e d_u - 5 b d_k - 18 b d_n + \\
& + d_s) \mu_5;
\end{aligned}$$

$$\begin{aligned}
c^6 \gamma^3 \mu_5 = & c \gamma (-b_s - b_k d - 12 b_n d - 3 b_m d_a - 4 b_m d_c - \\
& - 24 b_u d_a - 20 b_u d_c - 8 b_a d_i + 10 b_a d_d + 37 b_d d_i + \\
& + 12 b_o d_d + 24 b_o d_i + 10 b_b d_b + 12 b_b d_o + 37 b_i d_b - \\
& - 8 b_i d_e + 24 b_i d_o - 4 b_c d_m - 20 b_c d_u - 3 b_e d_m - \\
& - 24 b_e d_u - b d_k - 12 b d_m - d_s) \mu_5;
\end{aligned}$$

$$\begin{aligned}
c^5 \gamma^4 \mu_5 = & c \gamma (3 b_s - 9 b_n d - 3 b_m d_a + 2 b_m d_c - 24 b_u d_a - \\
& - 14 b_u d_c + 3 b_a d_d - 5 b_a d_i + 13 b_d d_d + 40 b_d d_i + \\
& + 15 b_o d_d + 27 b_o d_i + 13 b_b d_b + 3 b_b d_e + 15 b_b d_o + \\
& + 40 b_i d_b - 5 b_i d_e + 27 b_i d_o + 2 b_c d_m - 14 b_c d_u - \\
& - 3 b_e d_m - 24 b_e d_u - 9 b d_n + 3 d_s) \mu_5;
\end{aligned}$$

$$\begin{aligned}
c^9 \gamma \mu_4 = & c \gamma (4 B + 14 b_s d - 5 b_k d_a - 6 b_k d_c - 48 b_n d_u - \\
& - 39 b_n d_c + 10 b_m d_a - 10 b_m d_i - 4 b_u d_d - 80 b_u d_i - \\
& - 4 b_a d_b + 16 b_a d_e + 21 b_a d_o + 46 b_d d_b - 4 b_d d_e - \\
& + 36 b_d d_o + 36 b_o d_b + 21 b_o d_e + 66 b_o d_o + 10 b_b d_m - \\
& - 4 b_b d_u - 10 b_i d_m - 80 b_i d_u - 6 b_c d_k - 39 b_c d_n - \\
& - 5 b_e d_k - 48 b_e d_n + 14 b d_s + 4 D) \mu_4;
\end{aligned}$$

$$\begin{aligned}
c^8 \gamma^2 \mu_4 = & c \gamma (4 B - 4 b_s d - 14 b_k d_a - 8 b_k d_c - 60 b_n d_a - \\
& - 42 b_n d_c + 12 b_m d_a + 12 b_m d_i - 8 b_u d_d - 64 b_u d_i - \\
& - 4 b_a d_b + 6 b_a d_e + 4 b_a d_o + 56 b_d d_b - 4 b_d d_e + \\
& + 44 b_d d_o + 44 b_o d_b + 4 b_o d_e + 42 b_o d_o + 12 b_b d_m - \\
& - 8 b_b d_u + 12 b_i d_m - 64 b_i d_u - 8 b_c d_k - 42 b_c d_n - \\
& - 14 b_e d_k - 60 b_e d_n - 4 b d_s + 4 D) \mu_4;
\end{aligned}$$

$$\begin{aligned}
c^7 \gamma^3 \mu_4 = & c \gamma (B - 4 b_s d - 5 b_k d_a - 7 b_k d_c - 45 b_n d_u - 39 b_u d_c + \\
& + 8 b_m d_a + 16 b_m d_i - 12 b_u d_d - 60 b_u d_i - b_a d_b + \\
& + 8 b_a d_e + 11 b_a d_o + 60 b_d d_b - b_d d_e + 52 b_d d_o + \\
& + 52 b_o d_b + 11 b_o d_e + 66 b_o d_o + 8 b_b d_m - 12 b_b d_u + \\
& + 16 b_i d_m - 60 b_i d_u - 7 b_c d_k - 39 b_c d_n - 5 b_e d_k - \\
& - 45 b_e d_n - 4 b d_s + D) \mu_4;
\end{aligned}$$

$$\begin{aligned}
c^6 \gamma^4 \mu_4 = & c \gamma (2 B + 4 b_s d - 4 b_k d_a - 4 b_k d_c - 42 b_n d_u - \\
& - 36 b_n d_c + 20 b_m d_a + 28 b_m d_i - 48 b_u d_i - b_u d_b + \\
& + 8 b_a d_e + 14 b_a d_o + 60 b_d d_b - b_d d_e + 55 b_d d_o + \\
& + 55 b_o d_b + 14 b_o d_e + 72 b_o d_o + 20 b_b d_m + 28 b_i d_m -
\end{aligned}$$

$$\begin{aligned}
& -48 b_i d_u - 4 b_c d_k - 36 b_c d_n - 4 b_e d_k - 42 b_e d_n + \\
& + 4 b d_s + 2 D) \mu_4; \\
c^5 \gamma^5 \mu_4 & = c \gamma (5 B + 4 b_s d - 4 b_k d_a - 42 b_n d_a - 24 b_n d_c + \\
& + 20 b_m d_d + 28 b_m d_i - 48 b_u d_i + 5 b_u d_b + 14 b_a d_e + \\
& + 20 b_u d_o + 66 b_d d_b + 5 b_d d_e + 61 b_d d_o + 61 b_o d_b + \\
& + 20 b_o d_e + 78 b_o d_o + 20 b_b d_m + 28 b_i d_m - 48 b_i d_u - \\
& - 24 b_c d_n - 4 b_e d_k - 42 b_e d_n + 4 b d_s + 5 D) \mu_4; \\
c^9 \gamma^2 \mu_3 & = c \gamma (18 B d - 39 b_s d_a - 31 b_s d_c + 4 b_k d_d - 21 b_k d_i - \\
& - 33 b_n d_d - 177 b_n d_i + 72 b_m d_b + 27 b_m d_e + \\
& + 102 b_m d_o - 48 b_u d_b + 33 b_u d_e + 3 b_u d_o + 27 b_a d_m + \\
& + 33 b_a d_u + 72 b_d d_m - 48 b_d d_u + 102 b_o d_m + 3 b_o d_u + \\
& + 4 b_b d_k - 33 b_b d_n - 21 b_i d_k - 177 b_i d_n - 31 b_c d_s - \\
& - 39 b_e d_s + 18 b D) \mu_3; \\
c^8 \gamma^3 \mu_3 & = c \gamma (9 B d - 27 b_s d_a - 25 b_s d_c - 10 b_k d_d - 19 b_k d_i - \\
& - 53 b_n d_d - 169 b_n d_i + 85 b_m d_b + 30 b_m d_e + \\
& + 113 b_m d_o - 36 b_u d_b + 35 b_u d_e + 13 b_u d_o + \\
& + 30 b_a d_m + 35 b_a d_u + 85 b_d d_m - 36 b_d d_u + \\
& + 113 b_o d_m + 13 b_o d_u - 10 b_b d_k - 53 b_b d_n - \\
& - 19 b_i d_k - 169 b_i d_n - 25 b_c d_s - 27 b_e d_s + 9 b D) \mu_3; \\
c^7 \gamma^4 \mu_2 & = c \gamma (15 B d - 15 b_s d_a - 27 b_s d_c + b_k d_d - 7 b_k d_i - \\
& - 38 b_n d_d - 151 b_n d_i + 88 b_m d_b + 33 b_m d_e + \\
& + 134 b_m d_o - 33 b_u d_b + 38 b_u d_e + 34 b_u d_o + \\
& + 33 b_a d_m + 38 b_a d_u + 88 b_d d_m - 33 b_d d_u + \\
& + 134 b_o d_m + 34 b_o d_u + b_b d_k - 38 b_b d_n - 7 b_i d_k - \\
& - 151 b_i d_n - 27 b_c d_s - 15 b_e d_s + 15 b D) \mu_3; \\
c^6 \gamma^5 \mu_2 & = c \gamma (18 B d - 15 b_s d_a - 11 b_s d_c + 5 b_k d_d - 3 b_k d_i - \\
& - 26 b_n d_d - 139 b_n d_i + 100 b_m d_b + 33 b_m d_e + \\
& + 146 b_m d_o - 21 b_u d_b + 50 b_u d_e + 46 b_u d_o + \\
& + 33 b_a d_m + 50 b_a d_u + 100 b_d d_m - 21 b_d d_u + \\
& + 146 b_o d_m + 46 b_o d_u + 5 b_b d_k - 26 b_b d_n - 3 b_i d_k - \\
& - 139 b_i d_n - 11 b_c d_s - 15 b_e d_s + 18 b D) \mu_3; \\
c^9 \gamma^3 \mu_1 & = c \gamma (27 B d_a + 22 B d_c - 80 b_s d_d - 192 b_s d_i - \\
& - 21 b_k d_b + 16 b_k d_e + 30 b_k d_o - 192 b_n d_b + \\
& + 33 b_n d_e - 141 b_n d_o + 348 b_m d_m + 168 b_m d_u + \\
& + 168 b_u d_m + 240 b_u d_u + 16 b_a d_k + 33 b_a d_n + \\
& + 21 b_d d_k - 192 b_d d_n + 30 b_o d_k - 141 b_o d_n - \\
& - 80 b_b d_s - 192 b_i d_s + 22 b_c D + 27 b_e D) \mu_2; \\
c^6 \gamma^4 \mu_2 & = c \gamma (42 B d_a + 22 B d_c - 88 b_s d_d - 184 b_s d_i + \\
& + 30 b_k d_b + 24 b_k d_e + 64 b_k d_o - 174 b_n d_b + \\
& + 48 b_n d_e - 84 b_n d_o + 348 b_m d_m + 168 b_m d_u + \\
& + 168 b_u d_m + 108 b_u d_u + 24 b_a d_k + 48 b_a d_n +
\end{aligned}$$

$$\begin{aligned}
& + 30 b_a d_k - 174 b_d d_n + 64 b_o d_k - 84 b_o d_n - \\
& - 88 b_b d_s - 184 b_i d_s + 22 b_c D + 42 b_e D) \mu_2; \\
c^7 \gamma^5 \mu_2 & = c \gamma (45 B d_a + 26 B d_c - 56 b_s d_d - 152 b_s d_i + \\
& + 36 b_k d_b + 30 b_k d_e + 74 b_k d_o - 168 b_n d_b + \\
& + 54 b_n d_e - 66 b_n d_o + 396 b_m d_m + 204 b_m d_u + \\
& + 204 b_u d_n + 96 b_u d_u + 28 b_a d_k + 72 b_a d_n + \\
& + 46 b_d d_k - 138 b_a d_n + 84 b_o d_k - 36 b_o d_n - \\
& - 56 b_b d_s - 152 b_i d_s + 26 b_c D + 45 b_e D) \mu_2; \\
c^6 \gamma^6 \mu_2 & = c \gamma (45 B d_a + 41 B d_c - 56 b_s d_a - 152 d_s d_i + \\
& + 46 b_k d_b + 28 b_k d_e + 84 b_k d_o - 138 b_n d_b + 72 b_n d_e - \\
& - 36 b_n d_o + 396 b_m d_m + 204 b_m d_u + 204 b_u d_m + \\
& + 96 b_u d_u + 28 b_a d_k + 72 b_a d_n + 46 b_d d_k - 138 b_d d_n + \\
& + 84 b_o d_k - 36 b_o d_n - 56 b_b d_s - 152 b_i d_s + 41 b_c D + \\
& + 45 b_e D) \mu_2; \\
c^9 \gamma^4 \mu_1 & = c \gamma (-43 B d_a + 16 B d_i - 356 b_s d_b - 60 b_s d_e - \\
& - 418 b_s d_o + 314 b_k d_m + 228 b_k d_u + 192 b_n d_m + \\
& + 582 b_n d_u + 314 b_m d_k + 192 b_m d_u + 228 b_u d_k + \\
& + 582 b_u d_n - 60 b_a d_s - 356 b_d d_s - 418 b_o d_s - \\
& - 43 b_b D + 16 b_i D) \mu_1; \\
c^8 \gamma^5 \mu_1 & = c \gamma (-22 B d_a + 40 B d_i - 352 b_s d_b - 56 b_s d_c - \\
& - 366 b_s d_o + 358 b_k d_m + 272 b_k d_u + 252 b_n d_m + \\
& + 582 b_n d_u + 582 b_u d_n + 358 b_m d_k + 252 b_m d_u + \\
& + 272 b_u d_k + 450 b_u d_n - 56 b_a d_s - 352 b_d d_s - \\
& - 366 b_o d_s - 22 b_b D + 40 b_i D) \mu_1; \\
c^7 \gamma^6 \mu_1 & = c \gamma (-7 B d_a + 55 B d_i - 312 b_s d_b - 168 b_s d_e - \\
& - 326 b_s d_o + 378 b_k d_m + 292 b_k d_u + 312 b_n d_m + \\
& + 642 b_n d_u + 378 b_m d_k + 312 b_m d_n + 292 b_u d_k + \\
& + 642 b_u d_n - 16 b_a d_s - 312 b_d d_s - 326 b_o d_s - \\
& - 7 b_b D + 55 b_i D) \mu_1; \\
c^9 \gamma^5 \mu_0 & = c \gamma (-180 B d_b - 158 B d_e - 353 B d_o - 510 b_s d_m + \\
& + 136 b_s d_u + 1024 b_k d_k + 824 b_k d_n + 824 b_n d_k + \\
& + 1365 b_n d_n - 510 b_m d_s + 136 b_u d_s - 158 b_a D - \\
& - 180 b_d D - 353 b_o D) \mu_0; \\
c^8 \gamma^6 \mu_0 & = c \gamma (-160 B d_b - 80 B d_e - 328 B d_o - 352 b_s d_m + \\
& + 296 b_s d_u + 588 b_k d_k + 848 b_k d_n + 848 b_n d_k + \\
& + 1956 b_n d_n - 352 b_s d_m + 296 b_s d_u - 80 b_a D - \\
& - 160 b_d D - 328 b_o D) \mu_0; \\
c^7 \gamma^7 \mu_0 & = c \gamma (-115 B d_b - 103 B d_e - 487 B d_o - 352 b_s d_m + \\
& + 296 b_s d_u + 608 b_k d_k + 908 b_k d_n + 908 b_n d_k + \\
& + 2268 b_n d_n - 352 b_m d_s + 296 b_u d_s - 103 b_a D - \\
& - 115 b_d D - 487 b_o D) \mu_0.
\end{aligned}$$

met behulp van deze formules en de tabel voor  $(b d)_{12}$  berekent men de aantallen  $b^q c^{r_1} \gamma^{r_2} d^s$  en hieruit de aantallen  $b^q c^{r_1 + r_2} d^s$ . Evenzoo vindt men de aantallen  $a^p b^q c^{r_1} \gamma^{r_2} d^s$  met deze formules en de tabel voor  $(a b d)_{13}$ ; hieruit de aantallen  $a^p b^q c^{r_1 + r_2} d^s$ . En op dezelfde wijze worden de aantallen  $a^p b^q c^{r_1} \gamma^{r_2} d^s e^t$  met deze formules en de tabel voor  $(a b d e)_{14}$  gevonden, en hieruit de aantallen  $a^p b^q c^{r_1 + r_2} d^s e^t$ .

Het is duidelijk, dat voor de combinatie met herhaling van de  $d$  de formules voor de  $b$  en voor de combinaties met herhaling van de  $e$  de formules voor de  $a$  de weerkeeringen zijn, daar in de ruimte van vijf afmetingen de  $a$  en de  $e$ , de  $b$  en  $d$  tegenover elkaar staan, terwijl het vlak tegenover zichzelf staat.

### De aantallen kegelsneden.

Een kegelsnede kan in  $R^5$  aan 14 enkelvoudige voorwaarden voldoen. Inderdaad; het vlak is door 9 bepaald en de kegelsnede in dat vlak door 5. Men beschouwt stelsels kegelsneden  $(a_2^p b_2^q c^r)_{13}$ , waar  $a_2$  aanduidt, dat de gegeven hyperruimte  $E$  de kegelsnede aanraakt;  $b_2$  dat de gegeven ruimte  $D$  een punt der kegelsnede bevat;  $c$  dat het gegeven vlak  $C$  het vlak der kegelsnede in een punt snijdt. Met behulp van de ontaardingen  $(a^p b^{n_1 + q_1} c^r)_{13} = \xi$  en  $(a^{p_1 + n_1} b^q c^r)_{13} = \eta$  vindt men dan de aantallen kegelsneden  $(a_2^p b_2^q c^r)_{14}$ . Daar ieder hyperruimte dubbel telt, moet  $\xi$  met  $2^p$  en daar ieder ruimte door twee samengevallen punten van  $\eta$  gaat, moet  $\eta$  met  $2^q$  vermenigvuldigd worden.

Men heeft de twee formules:  $2 b_2 = \eta + a_2 + 2 c$ ;  $2 a_2 = \xi + b_2$ ; waaruit de recurrente betrekkingen  $3 a_2 = 2 \xi + \eta + 2 c$ ;  $3 b_2 = \xi + 2 \eta + 4 c$  volgen.

Evenzoo vindt men de aantallen kegelsneden  $(a_2 b_2 c d)_{16}$  met de ontaardingen  $(a^p b^{q_1 + q_2} c^r d^s) = \xi$  en  $(a^{p_1 + r_1} b^q c^r d^s)_{15} = \eta$ . En de aantallen kegelsneden  $(a_2 b_2 c d e)_{17}$  vindt men met behulp van  $(a^p b^{q_1 + q_2} c^r d^s e^t)_{16} = \xi$  en  $(a^{p_1 + r_1} b^q c^r d^s e^t)_{16} = \eta$ . (Zie: „Les hyperquadriques dans l'espace de quatre dimensions” van den heer Dr. P. H. Schoute, in de verh. v. d. Kon. Ak. v. Wet. te Amsterdam, deel VII, stuk 4.)

### De aantallen oppervlakken van den tweeden graad.

Een oppervlak van den tweeden graad  $O^2$  is door 17 enkelvoudige voorwaarden bepaald. Men beschouwt een  $\infty^1$  aantal  $O^2$ , die een eindig aantal ontaardingen bevatten, met name de kwadra-

tische kegels  $\phi$ , de  $\psi$  d. i. een dubbellijn, die twee vlakken en twee punten draagt en de  $\chi$ , d. i. een oneindig dunne  $O^2$ , m. a. w. een dubbelvlak, waarin een kegelsnede ligt.

### De aantallen kegels.

Nu is de  $\phi$  door de ruimte, den top en 5 beschrijvende lijnen, d. i. door  $8 + 3 + 5 = 16$  voorwaarden bepaald. De aantallen  $\phi$  vindt men met behulp van de formules:

$$\begin{aligned} 3 b_2 &= 2x + y + 4a + 2d, \\ 3 c_2 &= x + 2y + 2a + 4d, \end{aligned}$$

waar

$$\begin{aligned} x &= (a^p b^q c^{r_1+r_2} d^s e^t) \times 2^q, \\ y &= (a^p b^{q_1+q_2} c^r d^s e^t) \times 2^r. \end{aligned}$$

Om deze formules te bewijzen, beschouwen wij een vlakkenbundel en laten die twee vlakken overeenkomen, die door de twee snijpunten van de draagruimte met eenzelfden kegel van het stelsel gaan. De  $2 c_2$  coïncidenties van deze overeenkomst ( $c_2, c_2$ ) vindt men terug in de  $y$  keer, dat de draagruimte het dubbelvlak van een  $y$  snijdt, in de  $b_2$  keer, dat de draagruimte aan den kegel raakt en de  $d$  keer, dat de ruimte van den kegel de as van den bundel snijdt, tweemaal geteld; dus:

$$2 c_2 = y + b_2 + 2d.$$

Beschouwt men evenzoo een ruimtenbundel, waarbij overeenkomstige ruimten aan eenzelfden kegel raken, dan verkrijgt men  $2 b_2$  coïncidenties in de overeenkomst ( $b_2, b_2$ ), die uit drie groepen punten bestaan; eerstens de  $x$  punten, waarin de dubbellijn van de ont-aarding  $x$  de draaghyperruimte snijdt, tweedens de  $c_2$  punten die het vlak, waardoor de ruimten van den bundel gaan, door  $\varphi$  gesneden wordt en de  $a$  punten, waarbij de top van den kegel in de draaghyperruimte ligt, tweemaal geteld, zoodat:

$$2 b_2 = x + c_2 + 2a.$$

De  $\psi$  kan men vinden met behulp van de formules voor  $a^{p_1} a^{r_2}$  en  $c^{r_1} \gamma^{r_2}$  en de tabel voor  $(b d e)_{13}$ ; want eerst vindt men de aantallen  $(a^p \alpha^p b^q c^r \gamma^r d^s e^t)$  en daarna de aantallen  $(a^{p_1+p_2} b^q c^{r_1+r_2} d^s e^t) = \psi$ .

### De aantallen $\nu (a_2^p b_2^q c_2^r d^s)_{16}$ .

Voor een enkelvoudig oneindig stelsel van  $O^2$ 's in  $R_5$  heeft men de drie betrekkingen:

$$\begin{aligned} 2 c_2 &= \chi + 2 d_2 + b_2, \\ 2 b_2 &= \psi + c_2 + a_2, \\ 2 a_2 &= \phi + b_2; \end{aligned}$$

welke men aldus bewijst:

Beschouwt men eerst in een gegeven ruimte een vlakkenbundel en laat men twee vlakken met elkaar overeenstemmen, die door de snijpunten van de draagruimte met eenzelfde  $\nu$  van het gegeven stelsel gaan. Aldus verkrijgt men een correspondentie  $(c_2, c_2)$  met  $2 c_2$  coïncidenties. Op de kromme van den graad  $c_2$ , die in de draagruimte de meetkundige plaats der snijpunten met de  $\nu$  van het stelsel is, vinden wij drie groepen van punten, die een coïncidentie kenmerken, de  $\chi$ -snijpunten van de draagruimte met de dubbelvlakken der ontaardingen  $\chi$ , de  $b_2$ -punten van aanraking met de  $\nu$ , die de draagruimte aanraken en de  $2 d_2$ -snijpunten van de draagruimte der  $\nu$ , waarvan de ruimte de as van den bundel snijdt. Dus:

$$2 c_2 = \chi + b_2 + 2 d_2.$$

Tweedens beschouwt men in een gegeven hyperruimte een ruimtenbundel, en laat die twee ruimten overeenkomen, die eenzelfde  $\nu$  aanraken. De  $2 b_2$  coïncidenties van deze overeenkomst  $(b_2, b_2)$  vindt men terug in de  $\psi$ -snijpunten van de draaghyperruimten met de dubbellijnen van  $\psi$ , in de  $c_2$  keer, dat het basisvlak door een  $\nu$  gesneden wordt en de  $a_2$  keer, dat een  $\nu$  de draagruimte raakt, zoodat:

$$2 b_2 = \psi + c_2 + a_2.$$

Ten derde beschouwt men een hyperruimtebundel, waarvan een gegeven ruimte de basisruimte is en laat men de twee hyperruimten overeenkomen, die eenzelfde  $\nu$  van het stelsel aanraken. Dus bestaan de  $2 a_2$  coïncidenties van de overeenkomst  $(a_2, a_2)$  in de kegels  $\phi$  van het stelsel en in de  $b_2 \nu$ , die de basisruimte aanraken; waaruit:

$$2 a = \phi + b_2.$$

De aantallen  $O^2$ 's zijn nu te berekenen met de formules:

$$\begin{aligned} 4 a_2 &= 3 \phi + 2 \psi + \chi + 2 d, \quad 4 b_2 = 2 \phi + 4 \psi + 2 \chi + 4 d, \\ 4 c_2 &= \phi + 2 \psi + 3 \chi + 6 d, \end{aligned}$$

waar  $\phi$  met  $2^p$ ,  $\psi$  met  $2^q$  en  $\chi$  met  $2^r$  vermenigvuldigd moet worden.

De aantallen  $\kappa, \lambda, \mu, \nu$  van een enkelvoudig oneindig stelsel  $(a_2 b_2 c_2 d_2 e)_{19}$ .

In een  $E$  is de kwadratische ruimte een figuur van 19 afmetingen. Men verkrijgt dus een enkelvoudig oneindig stelsel kwadratische

ruimten door deze figuren 18 enkelvoudige voorwaarden op te leggen.

Bij de kwadratische ruimten moet men vier enkelvoudige voorwaarden  $a_2, b_2, c_2, d_2$  onderscheiden. Door  $a_2, b_2, c_2$  wijzen wij achtereenvolgens aan, dat een gegeven hyperruimte  $Z'$ , een gegeven ruimte  $D$ , een gegeven vlak  $C$  de kwadratische ruimte aanraken, hetgeen insluit, dat de kwadratische ruimte door de hyperruimte volgens een kegel, door de ruimte  $D$  volgens twee lijnen (reëel of imaginair), door het vlak  $C$  in twee sameengevallen punten gesneden wordt. Verder drukt  $d_2$  uit, dat een gegeven lijn de kwadratische ruimte snijdt. Wij zullen dus stelsels kwadratische ruimten beschouwen, welke wij door de symbolen  $(a_2^p b_2^q c_2^r d_2^s)_{19}$  of  ${}_2(p\ q\ r\ s)_{19}$  zullen voorstellen.

Een enkelvoudig oneindig stelsel kwadratische ruimten laat een eindig aantal van ieder der ontaardingen  $\alpha, \lambda, \mu, \nu$  toe, welke achtereenvolgens gekenmerkt zijn door het bezit van een dubbelpunt, een dubbellijn, een dubbelvlak en een dubbelruimte.

### De ontaarding $\alpha$ .

De ontaarding  $\alpha$  is een kwadratische hyperkegel; deze hyperkegel is bepaald, als men den top en negen beschrijvende lijnen kent en de hyperruimte, waarin de kegel ligt; zoodat  $\alpha$  van  $5 + 4 + 9 = 18$  afmetingen is.

Beschouwt men in een gegeven vlak een stralenbundel, dan wordt ieder lijn door  $d_2$  hyperkegels ontmoet, zoodat er  $2d_2$  coïncidenties zijn. Aan den anderen kant snijdt het beschouwde vlak de dubbelvlakken van  $z_1$ , die dc weerkeerige van  $z_3$  is (zie beneden); verder de  $c_1$  raakpunten van het draagvlak en de  $2e$  coïncidenties, welke ontstaan, doordat het centrum van den stralenbundel in de  $e$  van den hyperkegel komt. Dus:

$$2d_2 = z_1 + c_2 + 2e.$$

Ten tweede beschouwt men in een gegeven ruimte een vlakkenbundel en laat die vlakken overeenkomen, welke aan eenzelfde hyperkegel raken; dat geeft  $2c_2$  coïncidenties. Aan den anderen kant verkrijgt men een coïncidentie door de snijding van de dubbellijnen van  $z_2 = a^p b^{q_1+q_2} c^r d^{s_1+s_2} e^t$  met de draagruimte; verder nog  $b_2$ , doordat de draagruimte een hyperkegel raakt; eindelijk nog  $d_2$ , doordat de as van den vlakkenbundel een hyperkegel snijdt; zoodat:

$$2c_2 = z_2 + b_2 + d_2.$$

Beschouwt men ten derde een ruimtebundel in een gegeven hyperruimte, dan raken aan iedere ruimte  $b_2$  hyperkegels; dat geeft

$2 b_2$  coïncidenties. Deze coïncidenties zijn ook, als het volgt te verkrijgen; eerstens raken er  $c_2$  hyperkegels aan het draagvlak van den ruimtebundel; tweedens gebeurt het  $a$  keer, dat de top van een hyperkegel in de gegeven hyperruimte komt te liggen; derdens liggen in de hyperruimte  $z_3$  dubbelkegels; zoodat:

$$2 b_2 = c_2 + a + z_3.$$

De hyperkegels  $\kappa$  zijn door de formules

$$\begin{aligned} 4 b_2 &= 6 a + 2 e + 3 z_1 + 2 z_2 + z_3, \\ 4 c_2 &= 4 a + 4 e + 2 z_1 + 4 z_2 + 2 z_3, \\ 4 d_2 &= 2 a + 6 e + z_1 + 2 z_2 + 3 z_3, \end{aligned}$$

te bepalen, waarbij  $z_1 (p q r s t) = z_3 (t s r q p)$  en  $z_3$  een dubbelruimte is die een kegel draagt; waarbij  $z_2 = a^p b^{q_1+q_2} c^r d^{s_1+s_2} e^t$ ; tevens neme men  $z_1 \times 2^q, z_2 \times 2^r, z_3 \times 2^s$ .

#### De ontaarding $\lambda$ .

Verder is  $\lambda$  de weerkeerige van  $\zeta_3$ , zooals blijkt, als men van de ontaarding  $\lambda$ , die bestaat uit de lijnen, die op een gegeven lijn en een gegeven kegelsnede rusten, terwijl de lijn het vlak kruist, de kegelsnede op twee wijzen laat ontaarden.

#### De ontaarding $\mu$ .

De  $\mu$  is een dubbelruimte, welke een kegelsnede draagt, en is te berekenen met de formules:

$$3 a_2 = 2 \zeta_1 + \zeta_2 + 2 c, \quad 3 b_2 = \zeta_1 + 2 \zeta_2 + 4 c,$$

waar  $\zeta_1 = (a^p b^{q_1+q_2} c^r d^{s_1+s_2} e^t) 2^p$ ,  
 $\zeta_2 = (a^{p_1+p_2} b^q c^r d^{s_1+s_2} e^t) 2^q$ .

#### De ontaarding $\nu$ .

En de  $\nu$  stelt een dubbelhyperruimte voor die een  $O^2$  draagt.

De aantalen kwadratische ruimten  $(a_2^p b_2^q c_2^r d_2^s e^t)_{19}$ .

Voor een enkelvoudig oneindig aantal kwadratische ruimten heeft men de vier betrekkingen:

$$\begin{aligned} 2 d_2 &= \nu + c_2 + 2 e, \\ 2 c_2 &= \mu + b_2 + d_2, \\ 2 b_2 &= \lambda + a_2 + c_2, \\ 2 a_2 &= \kappa + b_2. \end{aligned}$$

Op een willekeurig vlak beschouwen wij een stralenbundel en laten wij met elkaar de twee stralen overeenkomen, die eenzelfde kwadratische ruimte snijden. Men vindt dus  $2 d_2$  coïncidenties van de overeenkomst ( $d_2, d_2$ ) terug in de  $\nu$  snijpunten van het draagvlak  $C$  met de dubbelruimten van de ontaarding  $\nu$ , de  $c_2$  punten van aanraking van  $C$  met kwadratische ruimten van het stelsel en  $2 e$  coïncidenties, welke ontstaan, doordat het centrum van den stralenbundel in de  $e$  van de hyperruimte komt. Dus:

$$2 d_2 = \nu + c_2 + 2 e.$$

Tweedens laten wij in een willekeurige ruimte de vlakken van een vlakkenbundel overeenstemmen, die eenzelfde kwadratische ruimte van het stelsel aanraken. Aldus doen wij tusschen de vlakken van den bundel een correspondentie ( $c_2, c_2$ ) ontstaan, waarvan men de  $2 c_2$  coïncidentievlekken terugvindt met behulp van de kromme van den graad  $c_2 + d_2$ , die in  $D$  de meetkundige plaats der punten van aanraking met kwadratische ruimten van het stelsel met de vlakken van den bundel vormt. Op deze kromme zijn drie groepen van punten, die een coïncidentie kenmerken: de  $\mu$  snijpunten van  $D$  met de dubbelvlakken van de ontaardingen  $\mu$ , de  $b_2$  punten van aanraking van  $D$  met kwadratische ruimten van het stelsel en de lijn  $B d_2$  keer geteld; dus:

$$2 c_2 = \mu + b_2 + d_2.$$

Derdens beschouwen wij in een willekeurige hyperruimte de ruimten van een ruimtenbundel en laten twee ruimten overeenkomen, die eenzelfde kwadratische ruimte aanraken. De  $2 b_2$  coïncidenties van deze overeenkomst ( $b_2, b_2$ ) vindt men terug in de  $\lambda$  keer, dat het gebeurt, dat de dubbellijn van  $\lambda$  de draaghyperruimte snijdt, in de  $a_2$  keer, dat de kwadratische ruimte de draaghyperruimte raakt en de  $c_2$  keer, dat de kwadratische ruimte het vlak raakt, waardoer de ruimten van den bundel gaan, zoodat:

$$2 b_2 = \lambda + a_2 + c_2.$$

Vierdens beschouwen wij in de vijfdimensionale ruimte een hyperruimtenbundel, waarbij twee hyperruimten met elkaar overeenkomen, die eenzelfde kwadratische ruimte raken. De  $2 a_2$  coïncidenties van deze correspondentie ( $a_2, a_2$ ) vindt men terug in de  $\kappa$  keer, dat het dubbelpunt in de  $R_5$  komt, en de  $b_2$  keer, dat de ruimte, waardoer alle hyperruimten van den bundel gaan, door de kwadratische ruimte wordt aangeraakt, zoodat:

$$2 a_2 = \kappa + b_2.$$

De formules, die de aantallen kwadratische hyperruimten helpen berekenen, zijn:

$$\begin{aligned} 5 a_2 &= 2 e + 4 z + 3 \lambda + 2 \mu + v, \\ 5 b_2 &= 4 e + 3 z + 6 \lambda + 4 \mu + 2 v, \\ 5 c_2 &= 6 e + 2 z + 4 \lambda + 6 \mu + 3 v, \\ 5 d_2 &= 8 e + z + 2 \lambda + 3 \mu + 4 v, \end{aligned}$$

waarbij  $z$  met  $2^p$ ,  $\lambda$  met  $2^q$ ,  $\mu$  met  $2^r$ ,  $v$  met  $2^s$  vermenigvuldigd is.

### De aantallen kwadratische hyperruimten ( $a_2^p b_2^q c_2^r d_2^s e_2^t$ )<sub>20</sub>.

Voor een enkelvoudig oneindig aantal kwadratische hyperruimten heeft men de vijf betrekkingen:

$$\begin{aligned} 2 e_2 &= \pi_5 + d_2, \\ 2 d_2 &= \pi_4 + e_2 + c_2, \\ 2 c_2 &= \pi_3 + b_2 + d_2, \\ 2 b_2 &= \pi_2 + a_2 + c_2, \\ 2 a_2 &= \pi_1 + b_2. \end{aligned}$$

Omdat in  $R_5$  de kwadratische hyperruimten haar eigen weerkeerige is, moeten deze betrekkingen zich evenzoo gedragen. Inderdaad; de eerste en de tweede hebben de vijfde en de vierde tot weerkeerige, terwijl de derde weerkeerig tegenover zichzelf staat. In de formules bezitten  $\pi_1$ ,  $\pi_2$ ,  $\pi_3$ ,  $\pi_4$  en  $\pi_5$  achtereenvolgens een dubbelpunt, een dubbellijn, een dubbelvlak, een dubbelruimte en een dubbelhyperruimte.

### De aantallen $\pi_1$ en $\pi_5$ .

De  $\pi_5$  zijn hyperruimten, die een kwadratische ruimte dragen, en  $\pi_1$  is de weerkeerige van  $\pi_5$ ; dus deze zijn bekend.

### De aantallen $\pi_2$ en $\pi_4$ .

De  $\pi_4$  zijn dubbelruimten die een  $v$  dragen, waarbij de formules:

$$\begin{aligned} (\pi_4 pqrs 2) &= (v pqrs), (\pi_4 pqrs 3) = (v p, q, r, s + 1), \\ (\pi_4 pqrs 4) &= 4(v pqrs 3) + 3(v p, q, r, s + 2), \\ (\pi_4 pqrs 5) &= 5(v pqrs 4) + 10(v p, q, r, s + 1, 3), \\ (\pi_4 pqrs 6) &= 16(v pqrs 5) + 5(v p, q, r, s + 1, 4) + 10(v pqrs + 2, 3), \\ (\pi_4 pqrs 7) &= 35(v p, q, r, s + 2, 4) - 14(v p, q, r, s + 1, 5), \\ (\pi_4 pqrs 8) &= 35(v p, q, r, s + 3, 4) - 14(v p, q, r, s + 2, 5), \\ (\pi_4 pqrs 9) &= 126(v p, q, r, s + 3, 5), \\ (\pi_4 p, q, r, s 10) &= 126(v p, q, r, s + 4, 5) \end{aligned}$$

de aantallen  $\pi_4$  helpen berekenen; en  $\pi_2$  is de weerkeerige van  $\pi_4$ .

### De aantallen $\pi_3$ .

En de ontaarding  $\pi_3$  bestaat uit de vlakken, die rusten op een vlak, waarin een kegelsnede ligt, en een punt gemeen heeft met een tweede kegelsnede, terwijl de vlakken der kegelsneden elkaar kruisen. De raakhyperruimten gaan door de tweede kegelsnede en raken aan de eerste kegelsnede.

Om de aantallen  $\pi_3$  uit de ontaardingen  $\eta_1$  en  $\eta_2$ , waarbij  $\eta_1$  een dubbelruimte is, welke een kegelsnede draagt, terwijl de ruimte zelve de doorsnede van twee hyperruimten is, en waarbij  $\eta_2$  een dubbelhyperruimte is, die een  $\mu$  draagt, te bepalen, beschouwt men op een lijn  $B$  een punteninvolutie, waarbij een puntenpaar de doorsnijding met eenzelfde  $\pi_3$  is. Het is duidelijk, dat men 2  $e$  coïncidenties verkrijgt, welke aan den anderen kant ontstaan uit de  $d_2$  keer, dat het gebeurt, dat de drager een  $\pi_3$  aanraakt, en uit de  $\eta_2$  keer, dat de drager de dubbelhyperruimten van  $\eta_2$  snijdt; dus:

$$2e = d_2 + \eta_2.$$

Beschouwt men nu nog een stralenbundel in een vlak, dan krijgt men een overeenkomst  $(d_2, d_2)$ . De 2  $d_2$  coïncidenties ontstaan aan den anderen kant uit de  $\eta_1$  keer tengevolge van het snijden van het draagvlak en de dubbelruimte van  $\eta_1$ , uit de  $e_2$  keer van het gaan der hyperruimte door het centrum van den stralenbundel en de 2  $c$  keer, dat het draagvlak het dubbelvlak van  $\pi_3$  ontmoet, zoodat:

$$2d_2 = e_2 + \eta_1 + 2c.$$

Tevens staat  $\pi_3$  in  $R_5$  weerkeerig tegenover zichzelf. De aantallen  $\pi_3$  worden bepaald door de formules:

$$3d_2 = 4c + 2\eta_1 + \eta_2, \quad 3e_2 = 2c + \eta_1 + 2\eta_2.$$

Hierbij is  $\eta_1$  met  $2^s$  en  $\eta_2$  met  $2^t$  te vermenigvuldigen.

Om de bovenstaande formules voor de aantallen kwadratische hyperruimten te bewijzen, beschouwen wij op een lijn een punteninvolutie, waarbij die twee punten met elkaar overeenkomen, welke eenzelfde kwadratische ruimte snijden; dit geeft 2  $e_2$  coïncidenties, welke teruggevonden worden in de snijpunten van de lijn (drager) met de dubbele hyperruimte van de ontaarding  $\pi_5$ ; en de raakpunten der lijn met kwadratische hyperruimten; hieruit volgt, dat:

$$2e_2 = \pi_5 + d_2.$$

Beschouw nu op een vlak een stralenbundel met een bepaalde top; we laten de raaklijnen aan eenzelfde kwadratische hyperruimte overeenkomen, hetgeen  $2 d_2$  coïncidenties geeft. Deze  $2 d_2$  coïncidenties vindt men terug in de  $c_2$  kwadratische hyperruimten, welke het draagvlak raken, in de  $\pi_4$  keer, dat het vlak een dubbelruimte van de ontaarding  $\pi_4$  snijdt, en in de  $e_2$  malen, dat een kwadratische hyperruimte door den top van den stralenbundel gaat. Dus:

$$2 d_2 = \pi_4 + c_2 + e_2$$

Beschouw ten derde een vlakkenbundel in een gegeven ruimte. Laat die twee vlakken overeenstemmen, welke eenzelfde kwadratische hyperruimte aanraken. Hierdoor verkrijgt men  $2 c_2$  coïncidenties, welke ook ontstaan door de  $\pi_3$  snijpunten van de draagruimte met de dubbelvlakken der ontaarding  $\pi_3$ , door de  $d_2$  kwadratische hyperruimten, welke de lijn (as) aanraken en door de  $b_2$  kwadratische hyperruimten, welke de draagruimten raken, zoodat:

$$2 c_2 = \pi_3 + d_2 + b_2.$$

De vierde en vijfde zijn de weerkeerigen van de tweede en de eerste; d. i.:

$$\begin{aligned} 2 b_2 &= \pi_2 + a_2 + c_2, \\ 2 a_2 &= \pi_1 + b_2. \end{aligned}$$

Hieruit vindt men:

$$\begin{aligned} 6 a_2 &= 5 \pi_1 + 4 \pi_2 + 3 \pi_3 + 2 \pi_4 + \pi_5, \\ 6 b_2 &= 4 \pi_1 + 8 \pi_2 + 6 \pi_3 + 4 \pi_4 + 2 \pi_5, \\ 6 c_2 &= 3 \pi_1 + 6 \pi_2 + 9 \pi_3 + 6 \pi_4 + 3 \pi_5, \\ 6 d_2 &= 2 \pi_1 + 4 \pi_2 + 6 \pi_3 + 8 \pi_4 + 4 \pi_5, \\ 6 e_2 &= \pi_1 + 2 \pi_2 + 3 \pi_3 + 4 \pi_4 + 5 \pi_5, \end{aligned}$$

waarbij  $\pi_1$  met  $2^p$ ,  $\pi_2$  met  $2^q$ ,  $\pi_3$  met  $2^r$ ,  $\pi_4$  met  $2^s$ ,  $\pi_5$  met  $2^t$  vermenigvuldigd moet worden.

Tengevolge van de symmetrie heeft men  $(pqrst) = (tsrqp)$ , zoodat de aantallen  $(pqrst)$  worden:

$(0,0,20,0,0) = 61.520.094$	$(0,4,14,2,0) = 62.779.392$	$(0,6,11,3,0) = 60.604.416$
$(0,1,19,0,0) = 61.520.094$	$(0,4,13,3,0) = 66.100.992$	$(0,6,10,4,0) = 65.882.112$
$(0,1,18,1,0) = 62.920.560$	$(0,4,12,4,0) = 67.933.184$	$(0,6,9,5,0) = 69.973.504$
$(0,2,18,0,0) = 60.119.628$	$(0,5,15,0,0) = 48.111.264$	$(0,6,8,6,0) = 72.235.008$
$(0,2,17,1,0) = 62.920.560$	$(0,5,14,1,0) = 53.943.936$	$(0,7,13,0,0) = 36.127.104$
$(0,2,16,2,0) = 61.440.192$	$(0,5,13,2,0) = 59.457.792$	$(0,7,12,1,0) = 42.213.376$
$(0,3,17,0,0) = 57.318.696$	$(0,5,14,3,0) = 62.268.800$	$(0,7,11,2,0) = 48.689.152$
$(0,3,16,1,0) = 61.400.928$	$(0,5,11,4,0) = 67.933.184$	$(0,7,10,3,0) = 55.326.720$
$(0,3,15,2,0) = 61.440.192$	$(0,5,10,5,0) = 69.984.256$	$(0,7,9,4,0) = 61.790.720$
$(0,3,14,3,0) = 66.100.992$	$(0,6,14,0,0) = 42.278.592$	$(0,7,8,5,0) = 67.625.984$
$(0,4,16,0,0) = 53.236.464$	$(0,6,13,1,0) = 48.430.080$	$(0,7,7,6,0) = 72.062.976$
$(0,4,15,1,0) = 58.361.664$	$(0,6,12,2,0) = 54.646.784$	$(0,7,6,7,0) = 74.180.352$

(0,8,12,0,0) = 30.040.832	(0,14,3,3,0) = 12.729.104	(1,1,4,14,0) = 12.209.088
(0,8,11,1,0) = 35.737.600	(0,14,2,4,0) = 16.005.472	(1,1,3,15,0) = 9.038.944
(0,8,10,2,0) = 42.051.584	(0,14,1,5,0) = 20.027.114	(1,1,2,16,0) = 6.601.264
(0,8 9 3 0) = 48.862.720	(0,14,0,6,0) = 24.486.032	(1,1,1,17,0) = 4.764.204
(0,8 8 4 0) = 55.955.456	(0,15,5,0,0) = 4.543.680	(1,1,0,18,0) = 3.403.094
(0,8 7 5 0) = 62.992.768	(0,15,4,1,0) = 5.818.752	(1,1,17,0,1) = 67.121.958
(0,8 6 6 0) = 69.160.704	(0,15,3,2,0) = 7.428.848	(1,1,16,1,1) = 68.999.088
(0,8 5 7 0) = 73.285.280	(0,15,2,3,0) = 9.452.736	(1,2,17,0,0) = 54.517.764
(0,8 4 8 0) = 74.304.384	(0,15,1,4,0) = 11.983.830	(1,2,16,1,0) = 59.881.296
(0,9,11,0,0) = 24.344.064	(0,15,0,5,0) = 15.131.172	(1,2,15,2,0) = 64.440.192
(0,9,10,1,0) = 29.423.616	(0,16,4,0,0) = 3.268.608	(1,2,14,3,0) = 67.761.792
(0,9 9 2 0) = 35.240.448	(0,16,3,1,0) = 4.208.656	(1,2,13,4,0) = 69.422.592
(0,9 8 3 0) = 41.769.984	(0,16,2,2,0) = 5.404.960	(1,2,12,5,0) = 69.079.808
(0,9 7 4 0) = 48.918.144	(0,16,1,3,0) = 6.921.642	(1,2,11,6,0) = 66.562.048
(0,9 6 5 0) = 56.492.416	(0,16,0,4,0) = 8.836.488	(1,2,10,7,0) = 61.964.288
(0,9 5 6 0) = 63.706.464	(0,17,3,0,0) = 2.328.560	(1,2 9 8 0) = 55.673.856
(0,9 4 7 0) = 69.235.200	(0,17,2,1,0) = 3.012.352	(1,2 8 9 0) = 48.299.520
(0,9 3 8 0) = 71.741.832	(0,17,1,2,0) = 3.888.278	(1,2,7,10,0) = 40.532.736
(0,9 2 9 0) = 70.474.536	(0,17,0,3,0) = 5.006.796	(1,2,6,11,0) = 32.999.552
(0,10,10,0,0) = 19.264.512	(0,18,2,0,0) = 1.644.768	(1,2,5,12,0) = 26.156.800
(0,10,9,1,0) = 23.606.784	(0,18,1,1,0) = 2.136.426	(1,2,4,13,0) = 20.257.856
(0,10,8,2,0) = 28.710.912	(0,18,0,2,0) = 2.769.760	(1,2,3,14,0) = 15.379.232
(0,10,7,3,0) = 34.621.824	(0,19,1,0,0) = 1.153.110	(1,2,2,15,0) = 11.476.624
(0,10,6,4,0) = 41.343.872	(0,19,0,1,0) = 1.503.092	(1,2,1,16,0) = 8.438.324
(0,10,5,5,0) = 48.816.704	(0,20,0,0,0) = 803.128	(1,2,0,17,0) = 6.125.314
(0,10,4,6,0) = 56.331.072	(1,0,19,0,0) = 61.520.094	(1,2,16,0,1) = 65.244.828
(0,10,3,7,0) = 62.523.264	(1,0,18,1,0) = 64.321.026	(1,2,15,1,1) = 68.999.088
(0,10,2,8,0) = 65.915.712	(1,0,17,2,0) = 65.721.492	(1,2,14,2,1) = 71.083.392
(0,10,1,9,0) = 65.588.454	(1,0,16,3,0) = 65.483.160	(1,3,16,0,0) = 49.154.232
(0,10,0,10,0) = 61.588.332	(1,0,15,4,0) = 63.486.864	(1,3,15,1,0) = 55.322.400
(0,11,9,0,0) = 14.922.240	(1,0,14,5,0) = 59.776.608	(1,3,14,2,0) = 61.118.592
(0,11,8,1,0) = 18.502.656	(1,0,13,6,0) = 54.581.568	(1,3,13,3,0) = 66.100.992
(0,11,7,2,0) = 22.800.000	(1,0,12,7,0) = 48.299.648	(1,3,12,4,0) = 69.765.376
(0,11,6,3,0) = 27.899.776	(1,0,11,8,0) = 41.434.368	(1,3,11,5,0) = 71.597.568
(0,11,5,4,0) = 33.871.040	(1,0,10,9,0) = 34.503.168	(1,3,10,6,0) = 71.159.808
(0,11,4,5,0) = 40.749.952	(1,0,9,10,0) = 27.949.056	(1 3 9 7 0) = 68.254.720
(0,11,3,6,0) = 47.929.344	(1,0,8,11,0) = 22.083.072	(1 3 8 8 0) = 63.048.192
(0,11,2,7,0) = 54.106.992	(1,0,7,12,0) = 17.068.800	(1 3 7 9 0) = 56.066.304
(0,11,1,8,0) = 57.802.374	(1,0,6,13,0) = 12.942.464	(1,3,6,10,0) = 48.065.920
(0,11,0,9,0) = 58.051.692	(1,0,5,14,0) = 9.651.456	(1,3,5,11,0) = 39.842.304
(0,12,8,0,0) = 11.341.824	(1,0,4,15,0) = 7.093.824	(1,3,4,12,0) = 32.055.744
(0,12,7,1,0) = 14.205.312	(1,0,3,16,0) = 5.148.704	(1,3,3,13,0) = 25.136.480
(0,12,6,2,0) = 17.700.224	(1,0,2,17,0) = 3.696.144	(1,3,2,14,0) = 19.281.840
(0,12,5,3,0) = 21.928.512	(1,0,1,18,0) = 2.628.084	(1,3,1,15,0) = 14.514.924
(0,12,4,4,0) = 26.992.128	(1,0,0,19,0) = 1.853.074	(1,3,0,16,0) = 10.751.334
(0,12,3,5,0) = 32.983.568	(1,0,18,0,1) = 67.121.958	(1,3,15,0,1) = 61.490.568
(0,12,2,6,0) = 39.403.728	(1,1,18,0,0) = 58.719.162	(1,3,14,1,1) = 66.914.784
(0,12,1,7,0) = 45.084.138	(1,1,17,1,0) = 62.920.560	(1,3,13,2,1) = 71.083.392
(0,12,0,8,0) = 48.651.728	(1,1,16,2,0) = 65.959.824	(1,3,12,3,1) = 73.429.760
(0,13,7,0,0) = 8.478.336	(1,1,15,3,0) = 67.479.456	(1,4,15,0,0) = 42.986.064
(0,13,6,1,0) = 10.710.400	(1,1,14,4,0) = 67.197.120	(1,4,14,1,0) = 49.526.208
(0,13,5,2,0) = 13.471.936	(1,1,13,5,0) = 64.971.648	(1,4,13,2,0) = 56.136.192
(0,13,4,3,0) = 16.864.896	(1,1,12,6,0) = 60.863.488	(1,4,12,3,0) = 62.436.608
(0,13,3,4,0) = 21.000.688	(1,1,11,7,0) = 55.164.928	(1,4,11,4,0) = 67.933.184
(0,13,2,5,0) = 25.995.904	(1,1,10,8,0) = 48.365.568	(1,4,10,5,0) = 72.035.328
(0,13,1,6,0) = 31.453.302	(1 1 9 9 0) = 41.057.280	(1 4 9 6 0) = 74.064.896
(0,13,0,7,0) = 36.375.004	(1,1,8,10,0) = 33.815.040	(1 4 8 7 0) = 73.461.248
(0,14,6,0,0) = 6.246.272	(1,1,7,11,0) = 27.097.344	(1 4 7 8 0) = 70.030.080
(0,14,5,1,0) = 7.948.864	(1,1,6,12,0) = 21.195.136	(1 4 6 9 0) = 64.066.688
(0,14,4,2,0) = 10.078.976	(1,1,5,13,0) = 16.233.472	(1,4,5,10,0) = 56.289.536

(1,4,4,11,0) = 47.628.864	(1 7 4 8 0) = 75.323.488	(1,10,4,5,0) = 32.683.200
(1,4,3,12,0) = 38.975.008	(1 7 3 9 0) = 74.248.464	(1,10,3,6,0) = 39.527.616
(1,4,2,13,0) = 30.991.120	(1,7,2,10,0) = 69.308.160	(1,10,2,7,0) = 45.690.720
(1,4,1,14,0) = 24.048.756	(1,7,1,11,0) = 61.497.756	(1,10,1,8,0) = 47.689.036
(1,4,0,15,0) = 18.278.514	(1,7,0,12,0) = 52.219.318	(1,10,0,9,0) = 50.514.930
(1,4,14,0,1) = 56.066.352	(1,7,11,0,1) = 34.569.088	(1,10,8,0,1) = 16.217.088
(1,4,13,1,1) = 62.746.176	(1,7,10,1,1) = 41.566.208	(1,10,7,1,1) = 20.379.648
(1,4,12,2,1) = 68.737.024	(1 7 9 2 1) = 49.383.424	(1,10,6,2,1) = 25.466.368
(1,4,11,3,1) = 73.429.760	(1 7 8 3 1) = 57.841.664	(1,10,5,3,1) = 31.618.688
(1,4,10,4,1) = 76.137.472	(1 7 7 4 1) = 66.598.912	(1,10,4,4,1) = 38.968.192
(1,5,14,0,0) = 36.445.920	(1 7 6 5 1) = 74.157.312	(1,10,3,5,1) = 46.372.032
(1,5,13,1,0) = 42.916.224	(1 7 5 6 1) = 78.521.984	(1,10,2,6,1) = 51.853.824
(1,5,12,2,0) = 49.835.776	(1 7 4 7 1) = 78.256.768	(1,10,1,7,1) = 53.687.352
(1,5,11,3,0) = 56.940.032	(1,8,11,0,0) = 18.647.296	(1,10,0,8,1) = 51.340.824
(1,5,10,4,0) = 63.831.040	(1,8,10,1,0) = 23.109.632	(1,11,8,0,0) = 7.761.408
(1 5 9 5 0) = 69.962.752	(1 8 9 2 0) = 28.429.312	(1,11,7,1,0) = 9.907.968
(1 5 8 6 0) = 74.496.512	(1 8 8 3 0) = 34.677.248	(1,11,6,2,0) = 12.600.448
(1 5 7 7 0) = 76.499.968	(1 8 7 4 0) = 41.880.832	(1,11,5,3,0) = 15.957.248
(1 5 6 8 0) = 75.328.640	(1 8 6 5 0) = 49.992.064	(1,11,4,4,0) = 20.113.216
(1 5 5 9 0) = 70.920.512	(1 8 5 6 0) = 58.253.224	(1,11,3,5,0) = 25.217.184
(1,5,4,10,0) = 63.845.440	(1 8 4 7 0) = 65.185.120	(1,11,2,6,0) = 30.878.112
(1,5,3,11,0) = 55.108.736	(1 8 3 8 0) = 69.179.280	(1,11,1,7,0) = 36.061.284
(1,4,2,12,0) = 45.823.888	(1 8 2 9 0) = 69.207.240	(1,11,0,8,0) = 39.501.122
(1,5,1,13,0) = 36.910.700	(1,8,1,10,0) = 65.261.196	(1,11,7,0,1) = 12.054.528
(1,5,0,14,0) = 28.944.950	(1,8,0,11,0) = 58.301.010	(1,11,6,1,1) = 15.292.928
(1,5,13,0,1) = 49.386.528	(1,8,10,0,1) = 27.571.968	(1,11,5,2,1) = 19.314.048
(1,5,12,1,1) = 56.755.328	(1 8 9 1 1) = 33.748.992	(1,11,4,3,1) = 24.269.184
(1,5,11,2,1) = 64.044.288	(1 8 8 2 1) = 40.925.184	(1,11,3,4,1) = 30.321.152
(1,5,10,3,1) = 70.722.048	(1 8 7 3 1) = 49.084.416	(1,11,2,5,1) = 36.539.040
(1 5 9 4 1) = 76.094.464	(1 8 6 4 1) = 58.103.296	(1,11,1,6,1) = 41.244.456
(1 5 8 5 1) = 79.030.272	(1 8 5 5 1) = 66.512.384	(1,11,0,7,1) = 42.940.880
(1,6,13,0,0) = 29.975.616	(1 8 4 6 1) = 72.118.016	(1,12,7,0,0) = 5.614.848
(1,6,12,1,0) = 35.996.672	(1 8 3 7 1) = 73.173.440	(1,12,6,1,0) = 7.215.488
(1,6,11,2,0) = 42.731.520	(1 8 2 8 1) = 69.235.200	(1,12,5,2,0) = 9.243.648
(1,6,10,3,0) = 50.049.024	(1,9,10,0,0) = 14.184.960	(1,12,4,3,0) = 11.801.280
(1 6 9 4,0) = 57.699.328	(1 9 9 1 0) = 17.789.952	(1,12,3,4,0) = 15.009.248
(1 6 8 5 0) = 65.278.464	(1 9 8 2 0) = 22.181.376	(1,12,2,5,0) = 19.008.240
(1 6 7 6 0) = 71.890.944	(1 9 7 3 0) = 27.473.664	(1,12,1,6,0) = 23.502.876
(1 6 6 7 0) = 76.297.728	(1 9 6 4 0) = 33.769.600	(1,12,0,7,0) = 27.665.870
(1 6 5 8 0) = 77.409.856	(1 9 5 5 0) = 41.140.992	(1,12,6,0,1) = 8.816.128
(1 6 4 9 0) = 74.763.936	(1 9 4 6 0) = 48.955.680	(1,12,5,1,1) = 11.271.808
(1,6,3,10,0) = 68.715.456	(1 9 3 7 0) = 55.811.328	(1,12,4,2,1) = 14.358.912
(1,6,2,11,0) = 60.284.640	(1 9 2 8 0) = 60.089.592	(1,12,3,3,1) = 18.217.216
(1,6,1,12,0) = 50.764.548	(1 9 1 9 0) = 60.702.372	(1,12,2,4,1) = 23.007.232
(1,6,0,13,0) = 41.296.706	(1,9,0,10,0) = 57.588.210	(1,12,1,5,1) = 27.997.512
(1,6,12,0,1) = 42.017.728	(1 9 0 9 1) = 21.394.944	(1,12,0,6,1) = 31.828.864
(1,6,11,1,1) = 49.466.368	(1 9 8 1 1) = 26.572.800	(1,13,6,0,0) = 4.014.208
(1,6,10,2,1) = 57.366.528	(1 9 7 2 1) = 32.765.952	(1,13,5,1,0) = 5.187.328
(1 6 9 3 1) = 65.349.632	(1 9 6 3 1) = 40.065.536	(1,13,4,2,0) = 6.686.016
(1 6 8 4 1) = 72.857.600	(1 9 5 4 1) = 48.512.384	(1,13,3,3,0) = 8.593.312
(1 6 7 5 1) = 78.503.424	(1 9 4 5 1) = 56.770.368	(1,13,2,4,0) = 11.010.256
(1 6 6 6 1) = 80.704.512	(1 9 3 6 1) = 62.666.976	(1,13,1,5,0) = 14.058.324
(1,7,12,0,0) = 23.953.560	(1 9 2 7 1) = 64.367.856	(1,13,0,6,0) = 17.518.762
(1,7,11,1,0) = 29.261.824	(1 9 1 8 1) = 61.815.152	(1,13,5,0,1) = 6.360.448
(1,7,10,2,0) = 35.414.016	(1 9 0 9 1) = 54.474.048	(1,13,4,1,1) = 8.184.704
(1 7 9 3 0) = 42.398.720	(1,10,9,0,0) = 10.579.968	(1,13,3,2,1) = 10.500.608
(1 7 8 4 0) = 50.120.192	(1,10,8,1,0) = 13.398.528	(1,13,2,3,1) = 13.427.200
(1 7 7 5 0) = 58.359.552	(1,10,7,2,0) = 16.889.088	(1,13,1,4,1) = 17.106.392
(1 7 6 6 0) = 66.258.432	(1,10,6,3,0) = 21.179.728	(1,13,0,5,1) = 20.979.200
(1 7 5 7 0) = 72.390.208	(1,10,5,4,0) = 26.398.208	(1,14,5,0,0) = 2.841.088

(1,14,4,1,0) =	3.688.640	(2,0,11,6,1) =	56.915.008	(2,2,6,10,0) =	55.599.104
(1,14,3,2,0) =	4.778.720	(2,0,10,7,1) =	48.563.328	(2,2,5,11,0) =	46.685.056
(1,14,2,3,0) =	6.176.368	(2,0,9,8,1) =	39.926.016	(2,2,4,12,0) =	37.954.688
(1,14,1,4,0) =	7.962.188	(2,0,8,9,1) =	31.750.656	(2,2,3,13,0) =	30.015.104
(1,14,0,5,0) =	10.235.230	(2,0,7,10,1) =	24.542.208	(2,2,2,14,0) =	23.184.448
(1,14,4,0,1) =	4.536.192	(2,0,6,11,1) =	18.531.328	(2,2,1,15,0) =	17.553.224
(1,14,3,1,1) =	5.868.800	(2,0,5,12,1) =	13.727.488	(2,2,0,16,0) =	13.064.344
(1,14,2,2,1) =	7.574.016	(2,0,4,13,1) =	10.008.960	(2,2,15,0,1) =	47.736.308
(1,14,1,3,1) =	9.748.008	(2,0,3,14,1) =	7.201.408	(2,2,14,1,1) =	64.830.480
(1,14,0,4,1) =	12.508.272	(2,0,2,15,1) =	5.123.584	(2,2,13,2,1) =	71.083.392
(1,15,4,0,0) =	1.993.536	(2,0,1,16,1) =	3.610.704	(2,2,12,3,1) =	75.776.128
(1,15,3,1,0) =	2.598.560	(2,0,0,17,1) =	2.523.944	(2,2,11,4,1) =	78.122.496
(1,15,2,2,0) =	3.381.072	(2,0,16,0,2) =	74.630.478	(2,2,10,5,1) =	77.399.808
(1,15,1,3,0) =	4.390.548	(2,1,17,0,0) =	45.316.366	(2,2,9,6,1) =	73.332.736
(1,15,0,4,0) =	5.689.146	(2,1,16,1,0) =	56.842.032	(2,2,8,7,1) =	66.299.904
(1,15,3,0,1) =	2.243.584	(2,1,15,2,0) =	62.920.560	(2,2,7,8,1) =	57.243.648
(1,15,2,1,1) =	3.203.584	(2,1,14,3,0) =	68.044.128	(2,2,6,9,1) =	47.365.120
(1,15,1,2,1) =	5.400.024	(3,1,13,4,0) =	71.648.064	(2,2,5,10,1) =	37.771.008
(1,15,0,3,1) =	6.987.744	(2,1,12,5,0) =	73.187.968	(2,2,4,11,1) =	29.224.320.
(1,16,3,0,0) =	1.388.512	(2,1,11,6,0) =	72.260.608	(2,2,3,12,1) =	22.075.520
(1,16,2,1,0) =	1.816.048	(2,1,10,7,0) =	68.763.648	(2,2,2,13,1) =	16.353.792
(1,16,1,2,0) =	2.371.596	(2,1,9,8,0) =	62.982.144	(2,2,1,14,1) =	11.922.000
(1,16,0,3,0) =	3.091.950	(2,1,8,9,0) =	55.541.760	(2,2,0,15,1) =	8.575.464
(1,16,2,0,1) =	2.243.584	(2,1,7,10,0) =	47.250.432	(2,2,14,0,2) =	71.924.652
(1,16,1,1,1) =	2.927.144	(2,1,6,11,0) =	38.901.760	(2,2,13,1,2) =	77.336.304
(1,16,0,2,1) =	3.812.304	(2,1,5,12,0) =	31.118.464	(2,2,12,2,2) =	80.468.864
(1,17,2,0,0) =	960.976	(2,1,4,13,0) =	24.282.240	(2,3,15,0,0) =	36.817.896
(1,17,1,1,0) =	1.260.500	(2,1,3,14,0) =	18.549.376	(2,3,14,1,0) =	43.730.016
(1,17,0,2,0) =	1.651.242	(2,1,2,15,0) =	13.914.304	(2,3,13,2,0) =	51.153.792
(1,17,1,0,1) =	1.560.024	(2,1,1,16,0) =	10.275.384	(2,3,12,3,0) =	58.772.224
(1,17,0,1,1) =	2.041.984	(2,1,0,17,0) =	7.486.424	(2,3,11,4,0) =	66.100.992
(1,18,1,0,0) =	661.425	(2,1,16,0,1) =	63.367.698	(2,3,10,5,0) =	72.473.038
(1,18,0,1,0) =	869.758	(2,1,15,1,1) =	68.999.088	(2,3,9,6,0) =	76.969.984
(1,18,0,0,1) =	1.078.064	(2,1,14,2,1) =	73.167.696	(2,3,8,7,0) =	78.667.776
(1,19,0,0,0) =	453.146	(2,1,13,3,1) =	75.252.000	(2,3,7,8,0) =	77.011.968
(2,0,18,0,0) =	55.918.230	(2,1,12,4,1) =	74.727.872	(2,3,6,9,0) =	72.067.072
(2,0,17,1,0) =	61.520.094	(2,1,11,5,1) =	71.333.248	(2,3,5,10,0) =	64.513.152
(2,0,16,2,0) =	66.198.156	(2,1,10,6,1) =	65.266.688	(2,3,4,11,0) =	55.415.424
(2,0,15,3,0) =	69.475.752	(2,1,9,7,1) =	57.200.640	(2,3,3,12,0) =	45.894.272
(2,0,14,4,0) =	70.907.376	(2,1,8,8,1) =	48.101.376	(2,3,2,13,0) =	36.845.760
(2,0,13,5,0) =	70.766.688	(2,1,7,9,1) =	38.959.104	(2,3,1,14,0) =	28.815.672
(2,0,12,6,0) =	67.145.408	(2,1,6,10,1) =	30.553.088	(2,3,0,15,0) =	22.042.104
(2,0,11,7,0) =	62.030.208	(2,1,5,11,1) =	23.335.168	(2,3,14,0,1) =	50.642.136
(2,0,10,8,0) =	55.296.768	(2,1,4,12,1) =	17.446.016	(2,3,13,1,1) =	58.577.568
(2,0,9,9,0) =	47.611.392	(2,1,3,13,1) =	12.816.512	(2,3,12,2,1) =	66.390.656
(2,0,8,10,0) =	39.681.024	(2,1,2,14,1) =	9.279.232	(2,3,11,3,1) =	73.429.760
(2,0,7,11,0) =	32.111.616	(2,1,1,15,1) =	6.636.464	(2,3,10,4,1) =	78.845.184
(2,0,6,12,0) =	25.321.472	(2,1,0,16,1) =	4.697.464	(2,3,9,5,1) =	81.466.880
(2,0,5,13,0) =	19.524.480	(2,1,15,0,2) =	74.630.478	(2,3,8,6,1) =	80.365.568
(2,0,4,14,0) =	14.766.720	(2,1,14,1,2) =	77.336.304	(2,3,7,7,1) =	75.356.160
(2,0,3,15,0) =	10.984.064	(2,2,16,0,0) =	43.790.700	(2,3,6,8,1) =	67.122.176
(2,0,2,16,0) =	8.053.824	(2,2,15,1,0) =	50.763.504	(2,3,5,9,1) =	56.959.232
(2,0,1,17,0) =	5.832.264	(2,2,14,2,0) =	57.796.992	(2,3,4,10,1) =	46.317.696
(2,0,0,18,0) =	4.178.104	(2,2,13,3,0) =	64.440.192	(2,3,3,11,1) =	36.373.120
(2,0,17,0,1) =	67.121.958	(2,2,12,4,0) =	70.108.160	(2,3,2,12,1) =	27.797.248
(2,0,16,1,1) =	70.876.218	(2,2,11,5,0) =	74.115.328	(2,3,1,13,1) =	20.785.584
(2,0,15,2,1) =	72.753.348	(2,2,10,6,0) =	75.757.568	(2,3,0,14,1) =	15.268.536
(2,0,14,3,1) =	72.339.000	(2,2,9,7,0) =	74.545.152	(2,3,13,0,2) =	66.513.000
(2,0,13,4,1) =	69.426.000	(2,2,8,8,0) =	70.422.528	(2,3,12,1,2) =	74.203.744
(2,0,12,5,1) =	64.124.128	(2,2,7,9,0) =	63.833.088	(2,3,11,2,2) =	80.468.864

(2,3,10,3,2) = 84.260.608	(2,5,1,11,1) = 45.949.872	(2 7 2 8 1) = 65.296.960
(2,4,14,0,0) = 29.905.776	(2,5,0,12,1) = 35.660.216	(2 7 1 9 1) = 58.262.448
(2,4,13,1,0) = 36.306.240	(2,5,11,0,1) = 49.705.888	(2,7,0,10,1) = 48.994.296
(2,4,12,2,0) = 43.535.360	(2,5,10,1,2) = 59.200.128	(2 7 9 0 2) = 31.288.704
(2,4,11,3,0) = 51.443.456	(2 5 9 2 2) = 69.265.664	(2 7 8 1 2) = 39.002.112
(2,4,10,4,0) = 59.729.896	(2 5 8 3 2) = 79.264.256	(2 7 7 2 2) = 48.187.392
(2 4 9 5 0) = 67.890.176	(2 5 7 4 2) = 86.332.416	(2 7 6 3 2) = 58.888.192
(2 4 8 6 0) = 74.928.128	(2 5 6 5 2) = 87.834.624	(2 7 5 4 2) = 68.127.232
(2 4 7 7 0) = 79.538.688	(2,6,12,0,0) = 17.933.004	(2 7 4 5 2) = 72.560.640
(2 4 6 8 0) = 80.627.200	(2,6,11,1,0) = 22.526.976	(2 7 3 6 2) = 70.466.176
(2 4 5 9 0) = 77.774.336	(2,6,10,2,0) = 28.096.512	(2 7 2 7 2) = 62.503.808
(2,4,4,10,0) = 71.401.344	(2 6 9 3 0) = 34.748.416	(2,8,10,0,0) = 9.722.624
(2,4,3,11,0) = 62.588.608	(2 6 8 4 0) = 42.541.056	(2 8 9 1 0) = 12.470.272
(2,4,2,12,0) = 52.672.768	(2 6 7 5 0) = 51.440.640	(2 8 8 2 0) = 15.933.440
(2,4,1,13,0) = 42.830.280	(2 6 6 6 0) = 60.625.920	(2 8 7 3 0) = 20.270.080
(2,4,0,14,0) = 33.841.144	(2 6 5 7 0) = 68.482.688	(2 8 6 4 0) = 25.658.368
(2,4,13,0,1) = 42.706.704	(2 6 4 8 0) = 73.237.120	(2 8 5 5 0) = 32.289.920
(2,4,12,1,1) = 50.764.480	(2 6 3 9 0) = 73.732.992	(2 8 4 6 0) = 39.659.136
(2,4,11,2,1) = 59.351.552	(2,6,2,10,0) = 69.900.864	(2 8 3 7 0) = 46.437.536
(2,4,10,3,1) = 68.014.336	(2,6,1,11,0) = 62.710.872	(2 8 2 8 0) = 50.999.904
(2 4 9 4 1) = 76.051.456	(2,6,0,12,0) = 53.674.088	(2 8 1 9 0) = 52.197.504
(2 4 8 5 1) = 81.966.080	(2,6,11,0,1) = 27.120.448	(2,8,0,10,0) = 49.915.224
(2 4 7 6 1) = 84.149.248	(2,6,10,1,1) = 33.666.048	(2 8 9 0 1) = 15.217.920
(2 4 6 7 1) = 81.715.712	(2 6 9 2 1) = 41.400.320	(2 8 8 1 1) = 19.396.608
(2 4 5 8 1) = 74.921.472	(2 6 8 3 1) = 50.333.696	(2 8 7 2 1) = 24.606.720
(2 4 4 9 1) = 65.028.352	(2 6 7 4 1) = 60.340.224	(2 8 6 3 1) = 31.046.656
(2,4,3,10,1) = 53.775.872	(2 6 6 5 1) = 69.811.200	(2 8 5 4 1) = 38.921.472
(2,4,2,11,1) = 42.756.928	(2 6 5 6 1) = 76.339.456	(2 8 4 5 1) = 47.028.352
(2,4,1,12,1) = 32.987.792	(2 6 4 7 1) = 77.991.552	(2 8 3 6 1) = 53.215.936
(2,4,0,13,1) = 24.852.008	(2 6 3 8 1) = 74.228.864	(2 8 2 7 1) = 55.562.272
(2,4,12,0,2) = 58.822.256	(2 6 2 9 1) = 66.068.736	(2 8 1 8 1) = 53.395.104
(2,4,11,1,2) = 67.938.624	(2,6,1,10,1) = 55.520.880	(2 8 0 9 1) = 47.632.944
(2,4,10,2,2) = 76.677.120	(2,6,0,11,1) = 44.637.304	(2 8 8 0 2) = 23.575.296
(2 4 9 3 2) = 84.088.576	(2,6,10,0,2) = 40.211.648	(2 8 7 1 2) = 29.816.832
(2 4 8 4 2) = 87.880.704	(2 6 9 1 2) = 49.134.592	(2 8 6 2 2) = 37.486.592
(2,5,13,0,0) = 23.505.312	(2 6 8 2 2) = 59.267.072	(2 8 5 3 2) = 46.796.288
(2,5,12,1,0) = 29.077.120	(2 6 7 3 2) = 70.346.752	(2 8 4 4 2) = 55.135.232
(2,5,11,2,0) = 35.627.264	(2 6 6 4 2) = 79.282.176	(2 8 3 5 2) = 59.403.520
(2,5,10,3,0) = 43.158.016	(2 6 5 5 2) = 82.867.712	(2 8 2 6 2) = 57.908.608
(2 5 9 4 0) = 51.567.616	(2 6 4 6 2) = 79.643.648	(2 8 1 7 2) = 51.227.936
(2 5 8 5 0) = 60.594.176	(2,7,11,0,0) = 13.340.032	(2 8 0 8 2) = 41.870.784
(2 5 7 6 0) = 69.285.376	(2,7,10,1,0) = 16.957.440	(2 9 9 0 0) = 6.974.976
(2 5 6 7 0) = 76.095.488	(2 7 9 2 0) = 21.440.603	(2 9 8 1 0) = 9.007.104
(2 5 5 8 0) = 79.491.072	(2 7 8 3 0) = 26.955.776	(2 9 7 2 0) = 11.596.800
(2 5 4 9 0) = 78.607.360	(2 7 7 4 0) = 33.641.472	(2 9 6 3 0) = 14.881.792
(2,5,3,10,0) = 73.585.472	(2 7 6 5 0) = 41.624.576	(2 9 5 4 0) = 19.026.816
(2,5,2,11,0) = 65.460.544	(2 7 5 6 0) = 50.246.016	(2 9 4 5 0) = 24.225.408
(2,5,1,12,0) = 55.705.208	(2 7 4 7 0) = 57.980.032	(2 9 3 6 0) = 30.099.552
(2,5,0,13,0) = 45.682.712	(2 7 3 8 0) = 63.035.072	(2 9 2 7 0) = 35.570.112
(2,5,12,0,1) = 34.648.928	(2 7 2 9 0) = 64.166.016	(2 9 1 8 0) = 39.288.480
(2,5,11,1,1) = 42.177.408	(2,7,1,10,0) = 61.214.232	(2 9 0 9 0) = 40.327.488
(2,5,10,2,1) = 50.688.768	(2,7,0,11,0) = 55.104.264	(2 9 8 0 1) = 11.039.232
(2 5 9 3 1) = 59.977.216	(2,7,10,0,1) = 20.574.848	(2 9 7 1 1) = 14.168.496
(2 5 8 4 1) = 69.620.736	(2 7 9 1 1) = 25.931.776	(2 9 6 2 1) = 18.166.784
(2 5 7 5 1) = 77.976.576	(2 7 8 2 1) = 32.466.944	(2 9 5 3 1) = 23.171.840
(2 5 6 6 1) = 82.905.600	(2 7 7 3 1) = 40.327.168	(2 9 4 4 1) = 29.424.000
(2 5 5 7 1) = 82.886.656	(2 7 6 4 1) = 49.607.680	(2 9 3 5 1) = 35.973.696
(2 5 4 8 1) = 77.723.648	(2 7 5 5 1) = 58.867.456	(2 9 2 6 1) = 41.040.672
(2 5 3 9 1) = 68.563.584	(2 7 4 6 1) = 65.714.048	(2 9 1 7 1) = 43.006.848
(2,5,2,10,1) = 57.335.616	(2 7 3 7 1) = 68.090.112	(2 9 0 8 1) = 41.166.496

(2 9 7 0 2) = 17.333.760	(2,12,5,0,1) = 3.904.768	(3,0,14,3,0) = 55.579.440
(2 9 6 1 2) = 22.147.072	(2,12,4,1,1) = 5.097.600	(3,0,13,4,0) = 59.377.440
(2 9 5 2 2) = 28.176.896	(2,12,3,2,1) = 6.642.304	(3,0,12,5,0) = 61.464.128
(2 9 4 3 2) = 35.676.160	(2,12,2,3,1) = 8.637.184	(3,0,11,6,0) = 61.406.208
(2 9 3 4 2) = 42.523.392	(2,12,1,4,1) = 11.205.552	(3,0,10,7,0) = 59.033.088
(2 9 2 5 2) = 46.107.648	(2,12,0,5,1) = 13.960.888	(3 0 9 8 0) = 54.534.144
(2 9 1 6 2) = 44.973.024	(2,12,4,0,2) = 6.290.432	(3 0 8 9 0) = 48.430.080
(2 9 0 7 2) = 39.626.144	(2,12,3,1,2) = 8.187.008	(3,0,7,10,0) = 41.433.600
(2,10,8,0,0) = 4.942.848	(2,12,2,2,2) = 10.632.064	(3,0,6,11,0) = 34.266.624
(2,10,7,1,0) = 6.417.408	(2,12,1,3,2) = 13.773.920	(3,0,5,12,0) = 27.509.376
(2,10,6,2,0) = 8.311.808	(2,12,0,4,2) = 16.716.224	(3,0,4,13,0) = 21.528.192
(2,10,5,3,0) = 10.736.768	(2,13,5,0,0) = 1.667.968	(3,0,3,14,0) = 16.484.288
(2,10,4,4,0) = 13.828.224	(2,13,4,1,0) = 2.189.952	(3,0,2,15,0) = 12.389.184
(2,10,3,5,0) = 17.751.168	(2,13,3,2,0) = 2.871.424	(3,0,1,16,0) = 9.163.824
(2,10,2,6,0) = 22.228.608	(2,13,2,3,0) = 3.759.424	(3,0,0,17,0) = 6.685.544
(2,10,1,7,0) = 26.431.848	(2,13,1,4,0) = 4.914.120	(3,0,16,0,1) = 50.808.033
(2,10,0,8,0) = 29.234.008	(2,13,0,5,0) = 6.412.136	(3,0,15,1,1) = 56.229.608
(2,10,7,0,1) = 7.891.968	(2,13,4,0,1) = 2.711.936	(3,0,14,2,1) = 60.552.776
(2,10,6,1,1) = 10.206.208	(2,13,3,1,1) = 3.552.896	(3,0,13,3,1) = 63.175.440
(2,10,5,2,1) = 13.161.728	(2,13,2,2,1) = 4.647.424	(3,0,12,4,1) = 63.550.816
(2,10,4,3,1) = 16.919.680	(2,13,1,3,1) = 6.068.816	(3,0,11,5,1) = 61.348.288
(2,10,3,4,1) = 21.674.112	(2,13,0,4,1) = 7.910.152	(3,0,10,6,1) = 56.659.968
(2,10,2,5,1) = 26.706.048	(2,13,3,0,2) = 4.393.856	(3 0 9 7 1) = 50.035.200
(2,10,1,6,1) = 30.635.088	(2,13,2,1,2) = 5.741.952	(3 0 8 8 1) = 42.326.016
(2,10,0,7,1) = 32.192.408	(2,13,1,2,2) = 7.490.203	(3 0 7 9 1) = 34.437.120
(2,10,6,0,2) = 12.520.488	(2,13,0,3,2) = 9.751.488	(3,0,6,10,1) = 27.099.648
(2,10,5,1,2) = 16.117.248	(2,14,4,0,0) = 1.145.984	(3,0,5,11,1) = 20.752.128
(2,10,4,2,2) = 20.677.632	(2,14,3,1,0) = 1.508.480	(3,0,4,12,1) = 15.547.008
(2,10,3,3,2) = 26.428.544	(2,14,2,2,0) = 1.983.424	(3,0,3,13,1) = 11.440.384
(2,10,2,4,2) = 31.737.984	(2,14,1,3,0) = 2.604.728	(3,0,2,14,1) = 8.294.080
(2,10,1,5,2) = 34.564.128	(2,14,0,4,0) = 3.416.104	(3,0,1,15,1) = 5.938.464
(2,10,0,6,2) = 33.733.728	(2,14,3,0,1) = 1.870.976	(3,0,0,16,1) = 4.207.264
(2,11,7,0,0) = 3.468.288	(2,14,2,1,1) = 2.458.368	(3,0,15,0,2) = 61.651.183
(2,11,6,1,0) = 4.523.008	(2,14,1,2,1) = 3.226.032	(3,0,14,1,2) = 64.875.944
(2,11,5,2,0) = 5.886.848	(2,14,0,3,1) = 4.227.480	(3,0,13,2,2) = 65.798.104
(2,11,4,3,0) = 7.645.312	(2,14,2,0,2) = 3.045.760	(3,0,12,3,2) = 63.926.192
(2,11,3,4,0) = 9.905.280	(2,14,1,1,2) = 3.993.696	(3,0,11,4,2) = 59.145.760
(2,11,2,5,0) = 12.799.296	(2,14,0,2,2) = 5.228.928	(3,0,10,5,2) = 51.971.648
(2,11,1,6,0) = 16.127.640	(2,15,3,0,0) = 783.488	(3 0 9 6 2) = 43.410.432
(2,11,0,7,0) = 19.270.458	(2,15,2,1,0) = 1.033.536	(3 0 8 7 2) = 34.616.832
(2,11,6,0,1) = 5.577.728	(2,15,1,2,0) = 1.362.120	(3 0 7 8 2) = 26.548.224
(2,11,5,1,1) = 7.250.688	(2,15,0,3,0) = 1.793.352	(3 0 6 9 2) = 19.762.176
(2,11,4,2,1) = 9.403.776	(2,15,2,0,1) = 1.283.584	(3,0,5,10,2) = 14.404.608
(2,11,3,3,1) = 12.165.248	(2,15,1,1,1) = 1.690.704	(3,0,4,11,2) = 10.341.888
(2,11,2,4,1) = 15.693.312	(2,15,0,2,1) = 2.224.584	(3,0,3,12,2) = 7.333.760
(2,11,1,5,1) = 19.455.984	(2,15,1,0,2) = 2.097.824	(3,0,2,13,2) = 5.147.776
(2,11,0,6,1) = 22.413.272	(2,15,0,2,2) = 2.758.464	(3,0,1,14,2) = 3.582.848
(2,11,5,0,2) = 8.923.648	(2,16,2,0,0) = 533.440	(3,0,0,15,2) = 2.476.064
(2,11,4,1,2) = 11.556.864	(2,16,1,1,0) = 704.952	(3,0,14,0,3) = 54.783.660
(2,11,3,2,2) = 14.926.720	(2,16,0,2,0) = 930.888	(3,1,16,0,0) = 33.331.734
(2,11,2,3,2) = 19.221.376	(2,16,1,0,1) = 876.464	(3,1,15,1,0) = 39.359.096
(2,11,1,4,2) = 23.218.656	(2,16,0,1,1) = 1.156.824	(3,1,14,2,0) = 45.632.768
(2,11,0,5,2) = 25.370.560	(2,16,0,0,2) = 1.237.184	(3,1,13,3,0) = 51.781.440
(2,12,6,0,0) = 2.413.568	(2,17,1,0,0) = 361.928	(3,1,12,4,0) = 57.290.752
(2,12,5,1,0) = 3.159.168	(2,17,0,1,0) = 479.016	(3,1,11,5,0) = 61.522.048
(2,12,4,2,0) = 4.128.384	(2,17,0,0,1) = 596.104	(3,1,10,6,0) = 63.779.328
(2,12,3,3,0) = 5.385.344	(2,18,0,0,0) = 244.840	(3 1 9 7 0) = 63.532.032
(2,12,2,4,0) = 7.011.264	(3,0,17,0,0) = 39.157.167	(3 1 8 8 0) = 60.638.208
(2,12,1,5,0) = 9.108.408	(3,0,16,1,0) = 44.982.600	(3 1 7 9 0) = 55.426.560
(2,12,0,6,0) = 11.534.648	(3,0,15,2,0) = 50.606.104	(3,1,6,10,0) = 48.600.576

(3,1,5,11,0) = 41.023.872	(3 2 9 5 1) = 68.788.480	(3 3 8 4 2) = 74.319.872
(3,1,4,12,0) = 33.490.560	(3 2 8 6 1) = 68.825.088	(3 3 7 5 2) = 74.151.424
(3,1,3,13,0) = 26.572.096	(3 2 7 7 1) = 65.273.856	(3 3 6 6 2) = 68.885.504
(3,1,2,14,0) = 20.579.392	(3 2 6 8 1) = 58.655.232	(3 3 5 7 2) = 59.671.552
(3,1,1,15,0) = 15.614.544	(3 2 5 9 1) = 50.102.016	(3 3 4 8 2) = 48.544.256
(3,1,0,16,0) = 11.642.104	(3,2,4,10,1) = 40.937.088	(3 3 3 9 2) = 37.559.296
(3,1,15,0,1) = 45.386.458	(3,2,3,11,1) = 32.260.864	(3,3,2,10,2) = 28.091.264
(3,1,14,1,1) = 51.906.440	(3,2,2,12,1) = 24.720.576	(3,3,1,11,2) = 20.583.616
(3,1,13,2,1) = 57.930.112	(3,2,1,13,1) = 18.523.680	(3,3,0,12,2) = 14.837.664
(3,1,12,3,1) = 62.800.064	(3,2,0,14,1) = 13.629.728	(3,3,11,0,3) = 47.199.888
(3,1,11,4,1) = 65.753.344	(3,2,13,0,2) = 52.899.060	(3,3,10,1,3) = 54.175.488
(3,1,10,5,1) = 66.036.608	(3,2,12,1,2) = 60.237.552	(3 3 9 2 3) = 60.275.648
(3 1 9 6 1) = 63.284.736	(3,2,11,2,2) = 66.633.408	(3 3 8 3 3) = 63.373.056
(3 1 8 7 1) = 57.744.384	(3,2,10,3,2) = 71.093.376	(3,4,13,0,0) = 16.359.888
(3 1 7 8 1) = 50.214.912	(3 2 9 4 2) = 72.106.880	(3,4,12,1,0) = 20.677.440
(3 1 6 9 1) = 41.774.592	(3 2 8 5 2) = 68.861.696	(3,4,11,2,0) = 25.907.328
(3,1,5,10,1) = 33.447.168	(3 2 7 6 2) = 61.722.624	(3,4,10,3,0) = 32.115.456
(3,1,4,11,1) = 25.957.248	(3 2 6 7 2) = 52.036.608	(3 4 9 4 0) = 39.291.392
(3,1,3,12,1) = 19.653.632	(3 2 5 8 2) = 41.548.800	(3 4 8 5 0) = 47.292.416
(3,1,2,13,1) = 14.586.688	(3 2 4 9 2) = 31.772.160	(3 4 7 6 0) = 55.317.504
(3,1,1,14,1) = 10.649.696	(3,2,3,10,2) = 23.584.640	(3 4 6 7 0) = 61.961.728
(3,1,0,15,1) = 7.669.664	(3,2,2,11,2) = 17.180.288	(3 4 5 8 0) = 65.764.864
(3,1,14,0,2) = 58.426.422	(3,2,1,12,2) = 12.326.784	(3 4 4 9 0) = 65.834.496
(3,1,13,1,2) = 63.953.784	(3,2,0,13,2) = 8.735.776	(3,4,3,10,0) = 62.189.696
(3,1,12,2,2) = 67.670.016	(3,2,12,0,3) = 52.255.736	(3,4,2,11,0) = 55.687.616
(3,1,11,3,2) = 68.706.624	(3,2,11,1,3) = 57.311.584	(3,4,1,12,0) = 47.616.624
(3,1,10,4,2) = 66.319.872	(3,2,10,2,3) = 60.447.680	(3,4,0,13,0) = 39.189.480
(3 1 9 5 2) = 60.532.864	(3,3,14,0,0) = 21.523.320	(3,4,12,0,1) = 24.994.992
(3 1 8 6 2) = 52.204.032	(3,3,13,1,0) = 26.686.752	(3,4,11,1,1) = 31.137.216
(3 1 7 7 2) = 42.685.440	(3,3,12,2,0) = 32.696.064	(3,4,10,2,1) = 38.323.584
(3 1 6 8 2) = 33.334.272	(3,3,11,3,0) = 39.484.800	(3 4 9 3 1) = 46.467.328
(3 1 5 9 2) = 25.119.744	(3,3,10,4,0) = 46.854.144	(3 4 8 4 1) = 55.293.440
(3,1,4,10,2) = 18.467.328	(3 3 9 5 0) = 54.416.896	(3 4 7 5 1) = 63.342.592
(3,1,3,11,2) = 13.350.016	(3 3 8 6 0) = 61.283.328	(3 4 6 6 1) = 68.605.952
(3,1,2,12,2) = 9.519.744	(3 3 7 7 0) = 66.216.960	(3 4 5 7 1) = 69.568.000
(3,1,1,13,2) = 6.712.704	(3 3 6 8 0) = 68.117.504	(3 4 4 8 1) = 65.901.128
(3,1,0,14,2) = 4.689.632	(3 3 5 9 0) = 66.481.152	(3 4 3 9 1) = 58.544.896
(3,1,13,0,3) = 54.783.660	(3,3,4,10,0) = 61.587.840	(3,4,2,10,1) = 49.185.536
(3,1,12,1,3) = 57.311.584	(3,3,3,11,0) = 54.357.376	(3,4,1,11,1) = 39.545.632
(3,2,15,0,0) = 27.304.372	(3,3,2,12,0) = 45.983.232	(3,4,0,12,1) = 30.762.336
(3,2,14,1,0) = 33.035.424	(3,3,1,13,0) = 37.539.796	(3,4,11,0,2) = 37.279.440
(3,2,13,2,0) = 39.484.096	(3,3,0,14,0) = 29.753.400	(3,4,10,1,2) = 45.509.952
(3,2,12,3,0) = 46.272.128	(3,3,13,0,1) = 31.850.184	(3 4 9 2 2) = 54.611.072
(3,2,11,4,0) = 53.059.456	(3,3,12,1,1) = 38.705.376	(3 4 8 3 2) = 64.119.552
(3,2,10,5,0) = 59.264.768	(3,3,11,2,1) = 46.273.536	(3 4 7 4 2) = 71.391.744
(3 2 9 6 0) = 64.026.624	(3,3,10,3,1) = 54.223.488	(3 4 6 5 2) = 73.869.312
(3 2 8 7 0) = 66.425.856	(3 3 9 4 1) = 61.979.648	(3 4 5 6 2) = 70.530.048
(3 2 7 8 0) = 65.849.856	(3 3 8 5 1) = 68.149.760	(3 4 4 7 2) = 62.240.256
(3 2 6 9 0) = 62.252.544	(3 3 7 6 1) = 71.150.592	(3 4 3 8 2) = 51.185.664
(3,2,5,10,0) = 56.177.280	(3 3 6 7 1) = 70.018.048	(3 4 2 9 2) = 39.826.176
(3,2,4,11,0) = 48.557.184	(3 3 5 8 1) = 64.844.800	(3,4,1,10,2) = 29.905.728
(3,2,3,12,0) = 40.409.024	(3 3 4 9 1) = 56.694.528	(3,4,0,11,2) = 21.979.040
(3,2,2,13,0) = 32.564.800	(3,3,3,10,1) = 47.126.912	(3,4,10,0,3) = 40.224.288
(3,2,1,14,0) = 25.544.240	(3,3,2,11,1) = 37.609.088	(3 4 9 1 3) = 48.075.328
(3,2,0,15,0) = 19.586.984	(3,3,1,12,1) = 29.096.352	(3 4 8 2 3) = 56.146.048
(3,2,14,0,1) = 38.866.476	(3,3,0,13,1) = 21.963.008	(3 4 7 3 3) = 61.824.768
(3,2,13,1,1) = 45.882.768	(3,3,12,0,2) = 45.560.568	(3 4 6 4 3) = 62.626.816
(3,2,12,2,1) = 53.060.160	(3,3,11,1,2) = 53.841.696	(3,5,12,0,0) = 12.042.336
(3,2,11,3,1) = 59.846.784	(3,3,10,2,2) = 62.173.440	(3,5,11,1,0) = 15.447.552
(3,2,10,4,1) = 65.470.080	(3 3 9 3 2) = 69.735.808	(3,5,10,2,0) = 19.699.200

(3 5 9 3 0) = 24.939.520	(3 6 1 9 1) = 45.872.736	(3 8 6 3 0) = 9.464.832
(3 5 8 4 0) = 31.290.368	(3 6,0,10,1) = 38.634.112	(3 8 5 4 0) = 12.337.920
(3 5 7 5 0) = 38.815.744	(3 6 9 0 2) = 21.689.024	(3 8 4 5 0) = 16.046.208
(3 5 6 6 0) = 46.866.944	(3 6 8 1 2) = 27.715.072	(3 8 3 6 0) = 20.339.264
(3 5 5 7 0) = 54.089.808	(3 6 7 2 2) = 35.164.160	(3 8 2 7 0) = 24.415.968
(3 5 4 8 0) = 58.725.632	(3 6 6 3 2) = 44.209.152	(3 8 1 8 0) = 27.247.328
(3 5 3 9 0) = 59.819.776	(3 6 5 4 2) = 52.349.952	(3 8 0 9 0) = 28.127.744
(3,5,2,10,0) = 57.171.776	(3 6 4 5 2) = 56.658.432	(3 8 8 0 1) = 6.849.792
(3,5,1,11,0) = 51.570.160	(3 6 3 6 2) = 55.533.824	(3 8 7 1 1) = 8.954.880
(3,5,0,12,0) = 44.303.448	(3 6 2 7 2) = 49.433.728	(3 8 6 2 1) = 11.683.840
(3,5,11,0,1) = 18.852.768	(3 6 1 8 2) = 40.505.024	(3 8 5 3 1) = 15.211.008
(3,5,10,1,1) = 23.950.848	(3 6 0 9 2) = 31.395.498	(3 8 4 4 1) = 19.754.496
(3 5 9 2 1) = 30.179.840	(3 6 8 0 3) = 24.741.888	(3 8 3 5 1) = 24.632.320
(3 5 8 3 1) = 37.641.216	(3 6 7 1 3) = 31.343.224	(3 8 2 6 1) = 28.492.672
(3 5 7 4 1) = 46.341.120	(3 6 6 2 3) = 39.340.544	(3 8 1 7 1) = 30.078.688
(3 5 6 5 1) = 54.918.144	(3 6 5 3 3) = 46.184.448	(3 8 0 8 1) = 29.008.160
(3 5 5 6 1) = 61.212.672	(3 6 4 4 3) = 48.924.672	(3 8 7 0 2) = 11.059.968
(3 5 4 7 1) = 63.411.456	(3 6 3 5 3) = 46.290.944	(3 8 6 1 2) = 14.412.800
(3 5 3 8 1) = 60.913.920	(3 6 2 6 3) = 39.241.728	(3 8 5 2 2) = 18.738.176
(3 5 2 9 1) = 54.523.776	(3,7,10,0,0) = 6.078.336	(3 8 4 3 2) = 21.751.808
(3,5,1,10,1) = 45.968.544	(3 7 9 1 0) = 7.932.928	(3 8 3 4 2) = 29.510.144
(3,5,0,11,1) = 37.036.736	(3 7 8 2 0) = 10.329.088	(3 8 2 5 2) = 32.353.024
(3,5,10,0,2) = 29.048.928	(3 7 7 3 0) = 13.412.352	(3 8 1 6 2) = 31.664.704
(3 5 9 1 2) = 36.408.832	(3 7 6 4 0) = 17.359.872	(3 8 0 7 2) = 27.937.632
(3 5 8 2 2) = 45.102.592	(3 7 5 5 0) = 22.381.824	(3 8 6 0 3) = 12.915.200
(3 5 7 3 2) = 55.041.024	(3 7 4 6 0) = 28.126.080	(3 8 5 1 3) = 16.783.360
(3 5 6 4 2) = 63.495.168	(3 7 3 7 0) = 33.547.456	(3 8 4 2 3) = 21.751.808
(3 5 5 5 2) = 67.507.200	(3 7 2 8 0) = 37.323.264	(3 8 3 3 3) = 26.201.600
(3 5 4 6 2) = 65.610.240	(3 7 1 9 0) = 38.497.920	(3 8 2 4 3) = 28.065.280
(3 5 3 7 2) = 58.416.384	(3,7,0,10,0) = 35.967.576	(3 8 1 5 3) = 26.406.272
(3 5 2 8 2) = 48.133.632	(3 7 9 0 1) = 9.787.520	(3 8 0 6 3) = 22.085.248
(3 5 1 9 2) = 37.413.312	(3 7 8 1 1) = 12.725.248	(3 9 8 0 0) = 2.910.720
(3,5,0,10,2) = 28.104.928	(3 7 7 2 1) = 16.495.616	(3 9 7 1 0) = 3.827.712
(3 5 9 0 3) = 32.373.248	(3 7 6 3 1) = 21.307.392	(3 9 6 2 0) = 5.026.816
(3 5 8 1 3) = 40.004.608	(3 7 5 4 1) = 27.403.776	(3 9 5 3 0) = 6.591.744
(3 5 7 2 3) = 48.660.992	(3 7 4 5 1) = 33.870.336	(3 9 4 4 0) = 8.629.632
(3 5 6 3 3) = 55.608.712	(3 7 3 6 1) = 38.968.832	(3 9 3 5 0) = 11.276.928
(3 5 5 4 3) = 57.889.792	(3 7 2 7 1) = 41.099.072	(3 9 2 6 0) = 14.357.664
(3 5 4 5 3) = 54.413.312	(3 7 1 8 1) = 39.672.576	(3 9 1 7 0) = 17.293.584
(3,6,11,0,0) = 8.637.120	(3 7 0 9 1) = 35.437.232	(3 9 0 8 0) = 19.337.776
(3,6,10,1,0) = 11.195.704	(3 7 8 0 2) = 15.662.976	(3 9 7 0 1) = 4.744.704
(3 6 9 2 0) = 14.458.880	(3 7 7 1 2) = 20.265.984	(3 9 6 1 1) = 6.225.920
(3 6 8 3 0) = 18.588.672	(3 7 6 2 2) = 26.119.168	(3 9 5 2 1) = 8.156.672
(3 6 7 4 0) = 23.764.992	(3 7 5 3 2) = 33.500.160	(3 9 4 3 1) = 10.667.520
(3 6 6 5 0) = 30.170.112	(3 7 4 4 2) = 40.336.896	(3 9 3 4 1) = 13.924.224
(3 6 5 6 0) = 37.316.352	(3 7 3 5 2) = 44.067.328	(3 9 2 5 1) = 17.438.400
(3 6 4 7 0) = 43.938.432	(3 7 2 6 2) = 43.229.312	(3 9 1 6 1) = 20.229.504
(3 6 3 8 0) = 48.492.800	(3 7 1 7 2) = 38.246.080	(3 9 0 7 1) = 21.331.968
(3 6 2 9 0) = 49.866.624	(3 7 0 8 2) = 31.201.888	(3 9 6 0 2) = 7.707.136
(3,6,1,10,0) = 47.869.080	(3 7 7 0 3) = 18.135.552	(3 9 5 1 2) = 10.037.424
(3,6,0,11,0) = 43.251.896	(3 7 6 1 3) = 23.355.904	(3 9 4 2 2) = 13.178.368
(3,6,10,0,1) = 13.751.688	(3 7 5 2 3) = 29.928.448	(3 9 3 3 2) = 17.180.928
(3 6 9 1 1) = 17.721.856	(3 7 4 3 3) = 35.739.648	(3 9 2 4 2) = 20.952.576
(3 6 8 2 1) = 22.718.464	(3 7 3 4 3) = 38.181.376	(3 9 1 5 2) = 23.020.608
(3 6 7 3 1) = 28.941.312	(3 7 2 5 3) = 36.073.216	(3 9 0 6 2) = 22.534.432
(3 6 6 4 1) = 36.575.232	(3 7 1 6 3) = 30.286.080	(3 9 5 0 3) = 9.047.040
(3 6 5 5 1) = 44.462.592	(3 7 0 7 3) = 23.240.192	(3 9 4 1 3) = 11.814.912
(3 6 4 6 1) = 50.560.512	(3 8 9 0 0) = 4.223.744	(3 9 3 2 3) = 15.397.120
(3 6 3 7 1) = 53.017.168	(3 8 8 1 0) = 5.536.768	(3 9 2 3 3) = 18.623.232
(3 6 2 8 1) = 51.240.448	(3 8 7 2 0) = 7.245.824	(3 9 1 4 3) = 19.985.280

(3 9 0 5 3) = 18.796.544	(3,12,3,0,2) = 2.497.280	(4,0,13,2,1) = 38.703.984
(3,10,7,0,0) = 1.993.728	(3,12,2,1,2) = 3.296.896	(4,0,12,3,1) = 42.174.400
(3,10,6,1,0) = 2.628.608	(3,12,1,2,2) = 4.349.352	(4,0,11,4,1) = 44.310.208
(3,10,5,2,0) = 3.461.888	(3,12,0,3,2) = 5.729.056	(4,0,10,5,1) = 44.580.288
(3,10,4,3,0) = 4.553.856	(3,12,2,0,3) = 2.017.920	(4 0 9 6 1) = 42.738.432
(3,10,3,4,0) = 5.982.336	(3,12,1,1,3) = 2.666.560	(4 0 8 7 1) = 39.971.392
(3,10,2,5,0) = 7.847.424	(3,12,0,2,3) = 5.144.768	(4 0 7 8 1) = 33.847.296
(3,10,1,6,0) = 10.026.672	(3,13,4,0,0) = 624.000	(4 0 6 9 1) = 28.117.248
(3,10,0,7,0) = 12.109.064	(3,13,3,1,0) = 827.008	(4,0,5,10,1) = 22.482.048
(3,10,6,0,1) = 3.263.488	(3,13,2,2,0) = 1.095.424	(4,0,4,11,1) = 17.428.032
(3,10,5,1,1) = 4.295.168	(3,13,1,3,0) = 1.450.032	(4,0,3,12,1) = 13.183.168
(3,10,4,2,1) = 5.645.824	(3,13,0,4,0) = 1.918.088	(4,0,2,13,1) = 9.776.416
(3,10,3,3,1) = 7.410.816	(3,13,3,0,1) = 1.030.016	(4,0,1,14,1) = 7.132.704
(3,10,2,4,1) = 9.712.512	(3,13,2,1,1) = 1.363.840	(4,0,0,15,1) = 5.133.664
(3,10,1,5,1) = 12.205.920	(3,13,1,2,1) = 1.804.640	(4,0,14,0,2) = 39.013.055
(3,10,0,6,1) = 14.191.456	(3,13,0,3,1) = 2.386.144	(4,0,13,1,2) = 42.957.844
(3,10,5,0,2) = 5.326.848	(3,13,2,0,2) = 1.697.664	(4,0,12,2,2) = 45.644.816
(3,10,4,1,2) = 6.996.480	(3,13,1,1,2) = 2.245.440	(4,0,11,3,2) = 46.446.016
(3,10,3,2,2) = 9.175.808	(3,13,0,2,2) = 2.967.648	(4,0,10,4,2) = 44.850.368
(3,10,2,3,2) = 12.014.208	(3,13,1,0,3) = 2.017.920	(4 0 9 5 2) = 40.896.576
(3,10,1,4,2) = 14.699.328	(3,13,0,1,3) = 2.666.560	(4 0 8 6 2) = 35.204.352
(3,10,0,5,2) = 16.176.992	(3,14,3,0,0) = 420.992	(4 0 7 7 2) = 28.723.200
(3,10,4,0,3) = 6.279.168	(3,14,2,1,0) = 558.592	(4 0 6 8 2) = 22.387.200
(3,10,3,1,3) = 8.232.704	(3,14,1,2,0) = 740.816	(4 0 5 9 2) = 16.846.848
(3,10,2,2,3) = 10.775.936	(3,14,0,3,0) = 981.976	(4,0,4,10,2) = 12.374.016
(3,10,1,3,3) = 13.075.968	(3,14,2,0,1) = 696.192	(4,0,3,11,2) = 8.938.304
(3,10,0,4,3) = 14.052.352	(3,14,1,1,1) = 923.040	(4,0,2,12,2) = 6.369.664
(3,11,6,0,0) = 1.358.848	(3,14,0,2,1) = 1.223.136	(4,0,1,13,2) = 4.488.992
(3,11,5,1,0) = 1.795.328	(3,14,1,0,2) = 1.349.988	(4,0,0,14,2) = 3.134.624
(3,11,4,2,0) = 2.369.920	(3,14,0,1,2) = 1.523.232	(4,0,13,0,3) = 36.878.754
(3,11,3,3,0) = 3.125.376	(3,14,0,0,3) = 1.369.280	(4,0,12,1,3) = 38.727.512
(3,11,2,4,0) = 4.117.248	(3,15,2,0,0) = 283.392	(4,0,11,2,3) = 38.790.912
(3,11,1,5,0) = 5.417.520	(3,15,1,1,0) = 376.368	(4,0,10,3,3) = 36.656.544
(3,11,0,6,0) = 6.941.656	(3,15,0,2,0) = 499.656	(4 0 9 4 3) = 32.471.072
(3,11,5,0,1) = 2.281.808	(3,15,1,0,1) = 469.344	(4 0 8 5 3) = 26.948.352
(3,11,4,1,1) = 2.944.512	(3,15,0,0,1) = 622.944	(4 0 7 6 3) = 21.057.024
(3,11,3,2,1) = 3.880.832	(3,15,0,0,2) = 776.544	(4 0 6 7 3) = 15.651.584
(3,11,2,3,1) = 5.109.120	(3,16,1,0,0) = 190.416	(4 0 5 8 3) = 11.231.232
(3,11,1,4,1) = 6.717.792	(3,16,0,1,0) = 253.020	(4 0 4 9 3) = 7.901.184
(3,11,0,5,1) = 8.455.792	(3,16,0,0,1) = 315.744	(4,0,3,10,3) = 5.502.592
(3,11,4,0,2) = 3.657.216	(3,17,0,0,0) = 127.752	(4,0,2,11,3) = 3.801.024
(3,11,3,1,2) = 4.817.248	(4,0,16,0,0) = 21.606.351	(4,0,1,12,3) = 2.608.320
(3,11,2,2,2) = 6.337.408	(4,0,15,1,0) = 25.746.772	(4,0,0,13,3) = 1.780.256
(3,11,1,3,2) = 8.326.464	(4,0,14,2,0) = 30.098.448	(4,0,12,0,4) = 26.169.856
(3,11,0,4,2) = 10.213.792	(4,0,13,3,0) = 42.957.844	(4,1,15,0,0) = 17.465.930
(3,11,3,0,3) = 4.325.632	(4,0,12,4,0) = 38.287.808	(4,1,14,1,0) = 21.395.096
(3,11,2,1,3) = 5.689.472	(4,0,11,5,0) = 41.299.008	(4,1,13,2,0) = 25.795.680
(3,11,1,2,3) = 7.473.280	(4,0,10,6,0) = 42.939.648	(4,1,12,3,0) = 30.514.624
(3,11,0,3,3) = 9.091.712	(4 0 9 7 0) = 42.839.040	(4,1,11,4,0) = 35.276.608
(3,12,5,0,0) = 922.368	(4 0 8 8 0) = 40.905.216	(4,1,10,5,0) = 39.658.368
(3,12,4,1,0) = 1.220.736	(4 0 7 9 0) = 37.376.256	(4 1 9 6 0) = 43.040.256
(3,12,3,2,0) = 1.614.464	(4,0,6,10,0) = 32.746.752	(4 1 8 7 0) = 44.772.864
(3,12,2,3,0) = 2.133.504	(4,0,5,11,0) = 27.614.400	(4 1 7 8 0) = 44.484.176
(3,12,1,4,0) = 2.816.976	(4,0,4,12,0) = 22.521.216	(4 1 6 9 0) = 42.005.760
(3,12,0,5,0) = 3.715.864	(4,0,3,13,0) = 17.852.192	(4,1,5,10,0) = 37.879.104
(3,12,4,0,1) = 1.519.104	(4,0,2,14,0) = 13.814.304	(4,1,4,11,0) = 32.707.584
(3,12,3,1,1) = 2.008.192	(4,0,1,15,0) = 10.473.504	(4,1,3,12,0) = 27.190.240
(3,12,2,2,1) = 2.652.544	(4,0,0,16,0) = 7.808.584	(4,1,2,13,0) = 21.890.080
(3,12,1,3,1) = 3.500.448	(4,0,15,0,1) = 29.887.193	(4,1,1,14,0) = 17.155.104
(3,12,0,4,1) = 4.614.752	(4,0,14,1,1) = 34.450.124	(4,1,0,15,0) = 13.143.424

(4,1,14,0,1) = 25.324.262	(4,2,12,1,1) = 25.158.960	(4 3 7 5 1) = 42.568.704
(4,1,13,1,1) = 30.196.264	(4,2,11,2,1) = 30.428.544	(4 3 6 6 1) = 46.477.312
(4,1,12,2,1) = 35.233.568	(4,2,10,3,1) = 26.037.056	(4 3 5 7 1) = 47.383.552
(4,1,11,3,1) = 40.038.592	(4 2 9 4 1) = 41.572.096	(4 3 4 8 1) = 45.030.912
(4,1,10,4,1) = 44.040.128	(4 2 8 5 1) = 46.037.760	(4 3 3 9 1) = 40.064.384
(4 1 9 5 1) = 46.422.144	(4 2 7 6 1) = 48.302.592	(4,3,2,10,1) = 33.679.424
(4 1 8 6 1) = 46.505.472	(4 2 6 7 1) = 47.676.416	(4,3,1,11,1) = 27.086.400
(4 1 7 7 1) = 44.095.488	(4 2 5 8 1) = 44.220.416	(4,3,0,12,1) = 21.072.864
(4 1 6 8 1) = 39.577.344	(4 2 4 9 1) = 38.682.624	(4,3,11,0,2) = 24.033.192
(4 1 5 9 1) = 33.752.448	(4,2,3,10,1) = 32.156.032	(4,3,10,1,2) = 29.750.688
(4,1,4,10,1) = 27.536.064	(4,2,2,11,1) = 35.659.840	(4 3 9 2 2) = 36.184.000
(4,1,3,11,1) = 21.672.896	(4,2,1,12,1) = 19.849.152	(4 3 8 3 2) = 43.022.720
(4,1,2,12,1) = 16.589.920	(4,2,0,13,1) = 14.983.200	(4 3 7 4 2) = 48.375.040
(4,1,1,13,1) = 12.420.128	(4,2,12,0,2) = 29.865.660	(4 3 6 5 2) = 50.385.920
(4,1,0,14,1) = 9.131.744	(4,2,11,1,2) = 35.698.128	(4 3 5 6 2) = 48.289.792
(4,1,13,0,2) = 35.068.266	(4,2,10,2,2) = 41.645.568	(4 3 4 7 2) = 42.678.272
(4,1,12,1,2) = 40.270.872	(4 2 9 3 2) = 47.107.136	(4 3 3 8 2) = 35.097.856
(4,1,11,2,2) = 44.843.616	(4 2 8 4 2) = 50.508.424	(4 3 2 9 2) = 27.294.464
(4,1,10,3,2) = 48.041.664	(4 2 7 5 2) = 50.567.710	(4,3,1,10,2) = 20.493.376
(4 1 9 4 2) = 48.804.160	(4 2 6 6 2) = 47.050.240	(4,3,0,11,2) = 15.059.328
(4 1 8 5 2) = 46.588.800	(4 2 5 7 2) = 40.764.416	(4,3,10,0,3) = 26.388.816
(4 1 7 6 2) = 41.685.504	(4 2 4 8 2) = 33.144.832	(4 3 9 1 3) = 31.969.376
(4 1 6 7 2) = 35.059.200	(4 2 3 9 2) = 25.629.440	(4 3 8 2 3) = 37.810.752
(4 1 5 8 2) = 27.927.552	(4,2,2,10,2) = 19.163.648	(4 3 7 3 3) = 42.039.168
(4 1 4 9 2) = 21.319.680	(4,2,1,11,2) = 14.038.464	(4 3 6 4 3) = 42.848.768
(4,1,3,10,2) = 15.809.728	(4,2,0,12,2) = 10.117.248	(4 3 5 5 3) = 39.731.712
(4,1,2,11,2) = 11.506.944	(4,2,11,0,3) = 31.395.880	(4 3 4 6 3) = 33.601.536
(4,1,1,12,2) = 8.250.336	(4,2,10,1,3) = 36.402.944	(4 3 3 7 3) = 26.198.528
(4,1,0,13,2) = 5.843.360	(4 2 9 2 3) = 40.836.512	(4 3 2 8 3) = 19.233.024
(4,1,12,0,3) = 35.029.996	(4 2 8 3 3) = 43.174.144	(4 3 1 9 3) = 13.692.288
(4,1,11,1,3) = 38.661.112	(4 2 7 4 3) = 42.244.736	(4,3,0,10,3) = 9.625.280
(4,1,10,2,3) = 40.925.280	(4 2 6 5 3) = 38.028.032	(4 3 9 0 4) = 21.578.032
(4 1 9 3 3) = 40.842.016	(4 2 5 6 3) = 31.568.896	(4 3 8 1 4) = 25.576.096
(4 1 8 4 3) = 37.993.792	(4 2 4 7 3) = 24.399.872	(4 3 7 2 4) = 28.735.296
(4 1 7 5 3) = 32.839.680	(4 2 3 8 3) = 17.870.336	(4 3 6 3 4) = 29.336.320
(4 1 6 6 3) = 26.462.464	(4 2 2 9 3) = 12.697.856	(4,4,12,0,0) = 7.245.744
(4 1 5 7 3) = 20.071.936	(4,2,1,10,3) = 8.913.280	(4,4,11,1,0) = 9.423.744
(4 1 4 8 3) = 14.561.280	(4,2,0,11,3) = 6.196.032	(4,4,10,2,0) = 12.191.232
(4 1 3 9 3) = 10.299.776	(4,2,10,0,4) = 24.624.912	(4 4 9 3 0) = 15.664.640
(4,1,2,10,3) = 7.204.160	(4 2 9 1 4) = 27.671.792	(4 4 8 4 0) = 19.953.152
(4,1,1,11,3) = 4.993.728	(4 2 8 2 4) = 29.423.424	(4 4 7 5 0) = 25.132.032
(4,1,0,12,3) = 3.436.384	(4,3,13,0,0) = 10.079.016	(4 4 6 6 0) = 30.767.104
(4,1,11,0,4) = 26.169.816	(4,3,12,1,0) = 12.912.288	(4 4 5 7 0) = 35.872.768
(4,1,10,1,4) = 27.714.800	(4,3,11,2,0) = 16.400.832	(4 4 4 8 0) = 39.300.096
(4,2,14,0,0) = 13.536.764	(4,3,10,3,0) = 20.610.432	(4 4 3 9 0) = 40.246.784
(4,2,13,1,0) = 16.994.512	(4 3 9 4 0) = 25.556.224	(4,4,2,10,0) = 38.587.136
(4,2,12,2,0) = 21.076.736	(4 3 8 5 0) = 31.159.296	(4,4,1,11,0) = 34.866.144
(4,2,11,3,0) = 25.752.640	(4 3 7 6 0) = 36.864.000	(4,4,0,12,0) = 29.980.992
(4,2,10,4,0) = 30.894.848	(4 3 6 7 0) = 41.670.656	(4,4,11,0,1) = 11.601.744
(4 2 9 5 0) = 36.233.472	(4 3 5 8 0) = 44.527.104	(4,4,10,1,1) = 14.958.720
(4 2 8 6 0) = 41.135.616	(4 3 4 9 0) = 44.779.008	(4 4 9 2 1) = 19.138.048
(4 2 7 7 0) = 44.719.104	(4,3,3,10,0) = 42.421.696	(4 4 8 3 1) = 24.241.664
(4 2 6 8 0) = 46.197.760	(4,3,2,11,0) = 38.050.560	(4 4 7 4 1) = 30.310.912
(4 2 5 9 0) = 45.209.088	(4,3,1,12,0) = 32.568.480	(4 4 6 5 1) = 36.402.176
(4,2,4,10,0) = 41.945.856	(4,3,0,13,0) = 26.820.672	(4 4 5 6 1) = 40.978.432
(4,2,3,11,0) = 37.050.544	(4,3,12,0,1) = 15.745.560	(4 4 4 7 1) = 42.727.424
(4,2,2,12,0) = 31.355.392	(4,3,11,1,1) = 19.889.376	(4 4 3 8 1) = 41.193.472
(4,2,1,13,0) = 25.602.272	(4,3,10,2,1) = 24.820.032	(4 4 2 9 1) = 36.927.488
(4,2,0,14,0) = 20.292.736	(4 3 9 3 1) = 30.502.016	(4,4,1,10,1) = 31.145.152
(4,2,13,0,1) = 20.452.260	(4 3 8 4 1) = 36.762.368	(4,4,0,11,1) = 25.095.840

(4,4,10,0,2) = 18.315.696	(4 5 7 1 3) = 19.963.904	(4 7 8 1 0) = 3.129.856
(4 4 9 1 2) = 23.317.376	(4 5 6 2 3) = 25.505.024	(4 7 7 2 0) = 4.141.056
(4 4 8 2 2) = 29.345.280	(4 5 5 3 3) = 30.355.456	(4 7 6 3 0) = 5.474.304
(4 4 7 3 2) = 36.380.160	(4 5 4 4 3) = 32.420.864	(4 7 5 4 0) = 7.229.952
(4 4 6 4 2) = 42.493.440	(4 5 3 5 3) = 30.771.200	(4 7 4 5 0) = 9.538.560
(4 4 5 5 2) = 45.554.688	(4 5 2 6 3) = 26.054.656	(4 7 3 6 0) = 12.251.392
(4 4 4 6 2) = 44.476.416	(4 5 1 7 3) = 20.033.792	(4 7 2 7 0) = 14.854.400
(4 4 3 7 2) = 39.659.520	(4 5 0 8 3) = 14.576.256	(4 7 1 8 0) = 16.676.800
(4 4 2 8 2) = 32.661.504	(4 5 7 0 4) = 13.388.160	(4 7 0 9 0) = 17.262.976
(4 4 1 9 2) = 25.362.816	(4 5 6 1 4) = 17.129.600	(4 7 8 0 1) = 3.895.936
(4,4,0,10,2) = 19.046.528	(4 5 5 2 4) = 20.745.216	(4 7 7 1 1) = 5.152.256
(4 4 9 0 3) = 20.808.256	(4 5 4 3 4) = 22.273.536	(4 7 6 2 1) = 6.807.552
(4 4 8 1 3) = 26.128.000	(4 5 3 4 4) = 20.928.512	(4 7 5 3 1) = 8.985.600
(4 4 7 2 3) = 32.292.096	(4 5 2 5 4) = 17.289.216	(4 7 4 4 1) = 11.847.168
(4 4 6 3 3) = 37.358.848	(4,6,10,0,0) = 3.479.232	(4 7 3 5 1) = 14.964.224
(4 4 5 4 3) = 39.201.280	(4 6 9 1 0) = 4.594.688	(4 7 2 6 1) = 17.457.408
(4 4 4 5 3) = 36.986.880	(4 6 8 2 0) = 6.059.520	(4 7 1 7 1) = 18.449.200
(4 4 3 6 3) = 31.479.808	(4 6 7 3 0) = 7.977.984	(4 7 0 8 1) = 17.849.152
(4 4 2 7 3) = 24.487.936	(4 6 6 4 0) = 10.481.664	(4 7 7 0 2) = 6.408.576
(4 4 1 8 3) = 17.892.096	(4 6 5 5 0) = 13.733.376	(4 7 6 1 2) = 8.462.848
(4 4 0 9 3) = 12.730.240	(4 6 4 6 0) = 17.516.544	(4 7 5 2 2) = 11.163.648
(4 4 8 0 4) = 17.579.568	(4 6 3 7 0) = 21.135.104	(4 7 4 3 2) = 14.708.736
(4 4 7 1 4) = 21.771.776	(4 6 2 8 0) = 23.691.520	(4 7 3 4 2) = 18.081.280
(4 4 6 2 4) = 25.553.792	(4 6 1 9 0) = 24.532.608	(4 7 2 5 2) = 19.950.592
(4 4 5 3 4) = 26.921.728	(4,6,0,10,0) = 23.592.512	(4 7 1 6 2) = 19.540.992
(4 4 4 4 4) = 25.155.584	(4 6 9 0 1) = 5.710.144	(4 7 0 7 2) = 17.199.104
(4,5,11,0,0) = 5.067.744	(4 6 8 1 1) = 7.524.352	(4 7 6 0 3) = 7.603.456
(4,5,10,1,0) = 6.656.256	(4 6 7 2 1) = 9.896.448	(4 7 5 1 3) = 10.028.032
(4 5 9 2 0) = 8.717.824	(4 6 6 3 1) = 12.985.344	(4 7 4 2 3) = 13.209.600
(4 5 8 3 0) = 11.376.128	(4 6 5 4 1) = 16.985.088	(4 7 3 3 3) = 16.104.448
(4 5 7 4 0) = 14.774.272	(4 6 4 5 1) = 21.299.712	(4 7 2 4 3) = 17.347.072
(4 5 6 5 0) = 19.066.880	(4 6 3 6 1) = 24.753.664	(4 7 1 5 3) = 16.309.248
(4 5 5 6 0) = 23.941.120	(4 6 2 7 1) = 26.247.936	(4 7 0 6 3) = 13.583.360
(4 5 4 7 0) = 28.528.640	(4 6 1 8 1) = 25.373.696	(4 7 5 0 3) = 6.697.984
(4 5 3 8 0) = 31.749.632	(4 6 0 9 1) = 22.652.416	(4 7 4 1 4) = 8.824.832
(4 5 2 9 0) = 32.814.848	(4 6 8 0 2) = 9.838.560	(4 7 3 2 4) = 10.975.232
(4,5,1,10,0) = 31.580.704	(4 6 7 1 2) = 12.268.544	(4 7 2 3 4) = 11.880.448
(4,5,0,11,0) = 28.564.992	(4 6 6 2 2) = 16.074.240	(4 7 1 4 4) = 11.038.208
(4,5,10,0,1) = 8.244.768	(4 6 5 3 2) = 20.984.832	(4 7 0 5 4) = 8.946.688
(4 5 9 1 1) = 10.779.392	(4 6 4 4 2) = 25.614.336	(4 8 8 0 0) = 1.597.696
(4 5 8 2 1) = 14.034.432	(4 6 3 5 2) = 28.207.616	(4 8 7 1 0) = 2.118.656
(4 5 7 3 1) = 18.172.416	(4 6 2 6 2) = 27.742.208	(4 8 6 2 0) = 2.807.808
(4 5 6 4 1) = 23.359.488	(4 6 1 7 2) = 24.499.456	(4 8 5 3 0) = 3.718.656
(4 5 5 5 1) = 28.815.360	(4 6 0 8 2) = 19.931.136	(4 8 4 4 0) = 4.921.344
(4 5 4 6 1) = 33.116.160	(4 6 7 0 3) = 11.013.120	(4 8 3 5 0) = 6.507.648
(4 5 3 7 1) = 34.970.624	(4 6 6 1 3) = 14.422.784	(4 8 2 6 0) = 8.376.064
(4 5 2 8 1) = 33.880.064	(4 6 5 2 3) = 18.817.536	(4 8 1 7 0) = 10.171.200
(4 5 1 9 1) = 30.346.560	(4 6 4 3 3) = 22.778.880	(4 8 0 8 0) = 11.428.224
(4,5,0,10,1) = 25.549.200	(4 6 3 4 3) = 24.513.536	(4 8 7 0 1) = 2.639.616
(4 5 9 0 2) = 13.314.016	(4 6 2 5 3) = 23.188.992	(4 8 6 1 1) = 3.496.960
(4 5 8 1 2) = 17.289.472	(4 6 1 6 3) = 19.395.072	(4 8 5 2 1) = 4.629.504
(4 5 7 2 2) = 22.310.400	(4 6 0 7 3) = 14.818.048	(4 8 4 3 1) = 6.124.032
(4 5 6 3 2) = 28.546.560	(4 6 6 0 4) = 9.646.720	(4 8 3 4 1) = 8.093.952
(4 5 5 4 2) = 34.271.232	(4 6 5 1 4) = 12.595.456	(4 8 2 5 1) = 10.244.480
(4 5 4 5 2) = 37.416.960	(4 6 4 2 4) = 15.542.784	(4 8 1 6 1) = 11.966.336
(4 5 3 6 2) = 36.825.088	(4 6 3 3 4) = 16.817.152	(4 8 0 7 1) = 12.685.248
(4 5 2 7 2) = 32.789.504	(4 6 2 4 4) = 15.732.736	(4 8 6 0 2) = 4.354.304
(4 5 1 8 2) = 26.813.056	(4 6 1 5 4) = 12.808.704	(4 8 5 1 2) = 5.762.048
(4 5 0 9 2) = 20.752.000	(4 6 0 6 4) = 9.423.872	(4 8 4 2 2) = 7.618.560
(4 5 8 0 3) = 15.488.512	(4 7 9 0 0) = 2.363.776	(4 8 3 3 2) = 10.063.872

(4 8 2 4 2) =	12.395.008	(4,10,1,3,2) =	4.638.720	(4,15,1,0,0) =	97.440
(4 8 1 5 2) =	13.688.132	(4,10,0,4,2) =	5.728.256	(4,15,0,1,0) =	129.792
(4 8 0 6 2) =	13.404.160	(4,10,3,0,3) =	2.372.096	(4,15,0,0,1) =	162.144
(4 8 5 0 3) =	5.178.880	(4,10,2,1,3) =	3.146.240	(4,16,0,0,0) =	65.088
(4 8 4 1 3) =	6.846.464	(4,10,1,2,3) =	4.170.624	(5,0,15,0,0) =	9.842.197
(4 8 3 2 3) =	9.042.432	(4,10,0,3,3) =	5.107.456	(5,0,14,1,0) =	12.107.244
(4 8 2 3 3) =	11.044.864	(4,10,2,0,4) =	2.099.456	(5,0,13,2,0) =	14.648.304
(4 8 1 4 3) =	11.905.280	(4,10,1,1,4) =	2.783.296	(5,0,12,3,0) =	17.372.000
(4 8 0 5 3) =	11.186.816	(4,10,0,2,4) =	3.478.784	(5,0,11,4,0) =	20.110.752
(4 8 4 0 4) =	4.571.136	(4,11,5,0,0) =	485.888	(5,0,10,5,0) =	22.609.344
(4 8 3 1 4) =	6.038.272	(4,11,4,1,0) =	646.144	(5,0,9,6,0) =	24.506.112
(4 8 2 2 4) =	7.525.376	(4,11,3,2,0) =	859.008	(5,0,8,7,0) =	25.433.856
(4 8 1 3 4) =	8.151.552	(4,11,2,3,0) =	1.141.632	(5,0,7,8,0) =	25.166.208
(4 8 0 4 4) =	7.568.384	(4,11,1,4,0) =	1.516.704	(5,0,6,9,0) =	23.712.384
(4 9 7 0 0) =	1.076.736	(4,11,0,5,0) =	2.014.208	(5,0,5,10,0) =	21.312.672
(4 9 6 1 0) =	1.429.504	(4,11,4,0,1) =	806.400	(5,0,4,11,0) =	18.347.520
(4 9 5 2 0) =	1.896.960	(4,11,3,1,1) =	1.071.872	(5,0,3,12,0) =	15.212.720
(4 9 4 3 0) =	2.515.968	(4,11,2,2,1) =	1.424.256	(5,0,2,13,0) =	12.219.984
(4 9 3 4 0) =	3.335.040	(4,11,1,3,1) =	1.891.776	(5,0,1,14,0) =	9.558.432
(4 9 2 5 0) =	4.417.920	(4,11,0,4,1) =	2.511.712	(5,0,0,15,0) =	7.311.200
(4 9 1 6 0) =	5.695.680	(4,11,3,0,2) =	1.337.344	(5,0,14,0,1) =	14.372.291
(4 9 0 7 0) =	6.924.544	(4,11,2,1,2) =	1.776.640	(5,0,13,1,1) =	17.189.364
(4 9 6 0 1) =	1.782.272	(4,11,1,2,2) =	2.359.296	(5,0,12,2,1) =	20.095.696
(4 9 5 1 1) =	2.364.416	(4,11,0,3,2) =	3.131.648	(5,0,11,3,1) =	22.849.504
(4 9 4 2 1) =	3.134.976	(4,11,2,0,3) =	1.597.952	(5,0,10,4,1) =	25.107.936
(4 9 3 3 1) =	4.154.112	(4,11,1,1,3) =	2.121.856	(5,0,9,5,1) =	26.402.880
(4 9 2 4 1) =	5.500.800	(4,11,0,2,3) =	2.816.256	(5,0,8,6,1) =	26.361.600
(4 9 1 5 1) =	6.973.440	(4,11,1,0,4) =	1.415.616	(5,0,7,7,1) =	24.898.560
(4 9 0 6 1) =	8.153.408	(4,11,0,1,4) =	1.879.040	(5,0,6,8,1) =	22.258.560
(4 9 5 0 2) =	2.946.560	(4,12,4,0,0) =	325.632	(5,0,5,9,1) =	18.912.960
(4 9 4 1 2) =	3.905.536	(4,12,3,1,0) =	433.280	(5,0,4,10,1) =	15.382.368
(4 9 3 2 2) =	5.173.248	(4,12,2,2,0) =	576.384	(5,0,3,11,1) =	12.077.920
(4 9 2 3 2) =	6.847.488	(4,12,1,3,0) =	766.560	(5,0,2,12,1) =	9.227.248
(4 9 1 4 2) =	8.446.030	(4,12,0,4,0) =	1.019.200	(5,0,1,13,1) =	6.896.880
(4 9 0 5 2) =	9.333.376	(4,12,3,0,1) =	540.628	(5,0,0,14,1) =	5.063.968
(4 9 4 0 3) =	3.911.296	(4,12,2,1,1) =	719.488	(5,0,13,0,2) =	20.006.437
(4 9 3 1 3) =	4.650.496	(4,12,1,2,1) =	756.736	(5,0,12,1,2) =	23.002.028
(4 9 2 2 3) =	6.154.752	(4,12,0,3,1) =	1.271.840	(5,0,11,2,2) =	25.603.312
(4 9 1 3 3) =	7.528.704	(4,12,2,0,2) =	898.048	(5,0,10,3,2) =	27.366.368
(4 9 0 4 3) =	8.119.424	(4,12,1,1,2) =	1.193.948	(5,0,9,4,2) =	27.697.824
(4 9 3 0 4) =	3.104.000	(4,12,0,2,2) =	1.586.944	(5,0,8,5,2) =	26.320.320
(4 9 2 1 4) =	4.108.544	(4,12,1,0,3) =	1.074.048	(5,0,7,6,2) =	23.435.520
(4 9 1 2 4) =	5.128.704	(4,12,0,1,3) =	1.427.456	(5,0,6,7,2) =	19.618.560
(4 9 0 3 4) =	5.558.272	(4,12,0,0,4) =	952.192	(5,0,5,8,2) =	15.567.360
(4,10,6,0,0) =	723.968	(4,13,3,0,0) =	217.984	(5,0,4,9,2) =	11.851.776
(4,10,5,1,0) =	962.048	(4,13,2,1,0) =	290.176	(5,0,3,10,2) =	8.773.472
(4,10,4,2,0) =	1.277.952	(4,13,1,2,0) =	386.208	(5,0,2,11,2) =	6.376.576
(4,10,3,3,0) =	1.696.896	(4,13,0,3,0) =	513.920	(5,0,1,12,2) =	4.566.512
(4,10,2,4,0) =	2.252.160	(4,13,2,0,1) =	362.368	(5,0,0,13,2) =	3.231.056
(4,10,1,5,0) =	2.987.616	(4,13,1,1,1) =	482.240	(5,0,12,0,3) =	20.013.254
(4,10,0,6,1) =	3.752.256	(4,13,0,2,1) =	641.632	(5,0,11,1,3) =	22.070.136
(4,10,5,0,1) =	1.200.128	(4,13,1,0,2) =	602.112	(5,0,10,2,3) =	23.292.144
(4,10,4,1,1) =	1.593.856	(4,13,0,1,2) =	801.024	(5,0,9,3,3) =	23.140.496
(4,10,3,2,1) =	2.115.840	(4,13,0,0,3) =	720.640	(5,0,8,4,3) =	21.410.976
(4,10,2,3,1) =	2.807.424	(4,14,2,0,0) =	145.792	(5,0,7,5,3) =	18.401.280
(4,10,1,4,1) =	3.723.072	(4,14,1,1,0) =	194.144	(5,0,6,6,3) =	14.748.800
(4,10,0,5,1) =	4.725.664	(4,14,0,2,0) =	258.496	(5,0,5,7,3) =	11.139.840
(4,10,4,0,2) =	1.987.584	(4,14,1,0,1) =	242.496	(5,0,4,8,3) =	8.060.928
(4,10,3,1,2) =	2.637.824	(4,14,0,1,1) =	322.848	(5,0,3,9,3) =	5.695.168
(4,10,2,2,2) =	3.499.008	(4,14,0,0,2) =	303.200	(5,0,2,10,3) =	3.979.680

(5,0,1,11,3) =	2.756.448	(5 1 8 3 3) =	24.611.968	(5,2,0,11,2) =	8.566.080
(5,0,0,12,3) =	1.895.600	(5 1 7 4 3) =	23.969.088	(5,2,10,0,3) =	15.064.616
(5,0,11,0,4) =	14.925.328	(5 1 6 5 3) =	21.459.328	(5 2 9 1 3) =	18.338.480
(5,0,10,1,4) =	15.758.232	(5 1 5 6 3) =	17.715.712	(5 2 8 2 3) =	21.759.520
(5 0 9 2 4) =	15.655.672	(5 1 4 7 3) =	13.627.392	(5 2 7 3 3) =	24.222.656
(5 0 8 3 4) =	14.383.696	(5 1 3 8 3) =	9.950.464	(5 2 6 4 3) =	24.672.512
(5 0 7 4 4) =	12.167.424	(5 1 2 9 3) =	7.061.888	(5 2 5 5 3) =	22.825.216
(5 0 6 5 4) =	9.517.120	(5,1,1,10,3) =	4.952.256	(5 2 4 6 3) =	19.235.840
(5 0 5 6 4) =	6.966.400	(5,1,0,11,3) =	3.439.776	(5 2 3 7 3) =	14.938.880
(5 0 4 7 4) =	4.869.120	(5,1,10,0,4) =	14.092.424	(5 2 2 8 3) =	10.934.144
(5 0 3 8 4) =	3.329.408	(5 1 9 1 4) =	15.817.784	(5 2 1 9 3) =	7.776.448
(5 0 2 9 4) =	2.264.192	(5 1 8 2 4) =	16.755.616	(5,2,0,10,3) =	5.462.112
(5,0,1,10,4) =	1.533.216	(5 1 7 3 4) =	16.277.408	(5 2 9 0 4) =	12.367.064
(5,0,0,11,4) =	1.034.752	(5 1 6 4 4) =	14.387.648	(5 2 8 1 4) =	14.707.920
(5,0,10,0,5) =	8.947.292	(5 1 5 5 4) =	11.608.576	(5 2 7 2 4) =	16.545.696
(5,1,14,0,0) =	7.577.150	(5 1 4 6 4) =	8.652.032	(5 2 6 3 4) =	16.876.928
(5,1,13,1,0) =	9.566.184	(5 1 3 7 4) =	6.090.752	(5 2 5 4 4) =	15.446.400
(5,1,12,2,0) =	11.924.608	(5 1 2 8 4) =	4.173.312	(5 2 4 5 4) =	12.728.064
(5,1,11,3,0) =	14.633.248	(5 1 1 9 4) =	2.842.624	(5 2 3 6 4) =	9.566.720
(5,1,10,4,0) =	17.612.160	(5,1,0,10,4) =	1.927.296	(5 2 2 7 4) =	6.735.872
(5 1 9 5 0) =	20.691.072	(5 1 9 0 5) =	8.936.540	(5 2 1 8 4) =	4.618.752
(5 1 8 6 0) =	23.492.352	(5 1 8 1 5) =	9.529.808	(5 2 0 9 4) =	3.147.776
(5 1 7 7 0) =	25.505.280	(5,2,13,0,0) =	5.588.116	(5 2 8 0 5) =	8.257.256
(5 1 6 8 0) =	26.287.616	(5,2,12,1,0) =	7.207.760	(5 2 7 1 5) =	9.357.776
(5 1 5 9 0) =	25.650.432	(5,2,11,2,0) =	9.215.968	(5 2 6 2 5) =	9.694.400
(5,1,4,10,0) =	23.725.440	(5,2,10,3,0) =	11.654.336	(5,3,12,0,0) =	3.968.472
(5,1,3,11,0) =	20.895.328	(5 2 9 4 0) =	14.533.248	(5,3,11,1,0) =	5.199.552
(5,1,2,12,0) =	17.637.952	(5 2 8 5 0) =	17.803.776	(5,3,10,2,0) =	6.777.600
(5,1,1,13,0) =	14.370.244	(5 2 7 6 0) =	21.135.360	(5 3 9 3 0) =	8.775.424
(5,1,0,14,0) =	11.368.640	(5 2 6 7 0) =	23.938.048	(5 3 8 4 0) =	11.262.720
(5,1,13,0,1) =	11.555.218	(5 2 5 8 0) =	25.595.136	(5 3 7 5 0) =	14.289.408
(5,1,12,1,1) =	14.283.032	(5 2 4 9 0) =	25.728.768	(5 3 6 6 0) =	17.601.536
(5,1,11,2,1) =	17.341.888	(5,2,3,10,0) =	24.346.016	(5 3 5 7 0) =	20.614.656
(5,1,10,3,1) =	20.591.072	(5,2,2,11,0) =	21.804.736	(5 3 4 8 0) =	22.645.248
(5 1 9 4 1) =	23.769.984	(5,2,1,12,0) =	18.635.744	(5 3 3 9 0) =	23.216.896
(5 1 8 5 1) =	26.293.632	(5,2,0,13,0) =	15.326.080	(5,3,2,10,0) =	22.258.752
(5 1 7 6 1) =	27.518.208	(5,2,12,0,1) =	8.827.404	(5,3,1,11,0) =	20.099.616
(5 1 6 7 1) =	27.069.952	(5,2,11,1,1) =	11.224.176	(5,3,0,12,0) =	17.269.344
(5 1 5 8 1) =	25.013.248	(5,2,10,2,1) =	14.092.704	(5,3,11,0,1) =	6.430.632
(5 1 4 9 1) =	21.800.448	(5 2 9 3 1) =	17.412.160	(5,3,10,1,1) =	8.355.648
(5,1,3,10,1) =	18.065.216	(5 2 8 4 1) =	21.074.304	(5 3 9 2 1) =	10.773.248
(5,1,2,11,1) =	14.380.576	(5 2 7 5 1) =	24.466.944	(5 3 8 3 1) =	13.750.016
(5,1,1,12,1) =	11.102.336	(5 2 6 6 1) =	26.740.736	(5 3 7 4 1) =	17.816.096
(5,1,0,13,1) =	8.367.136	(5 2 5 7 1) =	27.252.224	(5 3 6 5 1) =	20.913.664
(5,1,12,0,2) =	17.010.846	(5 2 4 8 1) =	25.862.400	(5 3 5 6 1) =	23.627.776
(5,1,11,1,2) =	20.400.744	(5 2 3 9 1) =	22.963.264	(5 3 4 7 1) =	24.675.840
(5,1,10,2,2) =	23.840.256	(5,2,2,10,1) =	19.263.456	(5 3 3 8 1) =	23.788.544
(5 1 9 3 2) =	26.948.896	(5,2,1,11,1) =	15.466.752	(5 3 2 9 1) =	21.300.608
(5 1 8 4 2) =	28.817.280	(5,2,0,12,1) =	12.016.416	(5,3,1,10,1) =	17.940.480
(5 1 7 5 2) =	28.742.784	(5,2,11,0,2) =	13.620.948	(5,3,0,11,1) =	14.439.072
(5 1 6 6 2) =	26.621.696	(5,2,10,1,2) =	16.961.232	(5,3,10,0,2) =	10.280.664
(5 1 5 7 2) =	22.956.544	(5 2 9 2 2) =	20.731.616	(5 3 9 1 2) =	13.190.848
(5 1 4 8 2) =	18.587.618	(5 2 8 3 2) =	24.736.448	(5 3 8 2 2) =	16.726.784
(5 1 3 9 2) =	14.329.984	(5 2 7 4 2) =	27.859.584	(5 3 7 3 2) =	20.882.176
(5,1,2,10,2) =	10.695.936	(5 2 6 5 2) =	29.014.528	(5 3 6 4 2) =	24.511.232
(5,1,1,11,2) =	7.824.096	(5 2 5 6 2) =	27.763.712	(5 3 5 5 2) =	26.341.888
(5,1,0,12,2) =	5.631.936	(5 2 4 7 2) =	24.472.576	(5 3 4 6 2) =	25.723.904
(5,1,11,0,3) =	17.956.372	(5 2 3 8 2) =	20.064.128	(5 3 3 7 2) =	22.901.248
(5,1,10,1,3) =	20.848.128	(5 2 2 9 2) =	15.563.648	(5 3 2 8 2) =	18.812.672
(5 1 9 2 3) =	23.357.776	(5,2,1,10,2) =	11.670.048	(5 3 1 9 2) =	14.580.352

(5,3,0,10,2) = 10.937.664	(5 4 5 3 3) = 17.410.048	(5 5 3 3 4) = 9.523.712
(5 3 9 0 3) = 11.790.752	(5 4 4 4 3) = 18.654.720	(5 5 2 4 4) = 8.899.584
(5 3 8 1 3) = 14.917.440	(5 4 3 5 3) = 17.704.960	(5 5 1 5 4) = 7.209.984
(5 3 7 2 3) = 18.565.248	(5 4 2 6 3) = 14.949.376	(5 5 0 6 4) = 5.280.256
(5 3 6 3 3) = 21.579.392	(5 4 1 7 3) = 11.448.576	(5 5 5 0 5) = 3.891.520
(5 3 5 4 3) = 22.689.024	(5 4 0 8 3) = 8.311.680	(5 5 4 1 5) = 4.871.808
(5 3 4 5 3) = 21.396.480	(5 4 7 0 4) = 7.547.840	(5 5 3 2 5) = 5.406.976
(5 3 3 6 3) = 18.163.712	(5 4 6 1 4) = 9.747.008	(5 5 2 3 5) = 5.095.936
(5 3 2 7 3) = 14.078.976	(5 4 5 2 4) = 11.891.200	(5 5 1 4 5) = 4.101.120
(5 3 1 8 3) = 10.262.016	(5 4 4 3 4) = 12.809.984	(5 5 0 5 5) = 2.951.168
(5 3 0 9 3) = 7.294.976	(5 4 3 4 4) = 12.032.000	(5 6 9 0 0) = 1.243.328
(5 3 8 0 4) = 10.026.208	(5 4 2 5 4) = 9.905.152	(5 6 8 1 0) = 1.655.040
(5 3 7 1 4) = 12.504.576	(5 4 1 6 4) = 7.302.656	(5 6 7 2 0) = 2.202.624
(5 3 6 2 4) = 14.752.192	(5 4 0 7 4) = 5.088.768	(5 6 6 3 0) = 2.930.688
(5 3 5 3 4) = 15.573.376	(5 4 6 0 5) = 5.402.912	(5 6 5 4 0) = 3.898.368
(5 3 4 4 4) = 14.539.776	(5 4 5 1 5) = 6.639.360	(5 6 4 5 0) = 5.184.000
(5 3 3 5 4) = 12.058.624	(5 4 4 2 5) = 7.307.136	(5 6 3 6 0) = 6.706.688
(5 3 2 6 4) = 9.026.560	(5 4 3 3 5) = 6.920.192	(5 6 2 7 0) = 8.174.336
(5 3 1 7 4) = 6.316.032	(5 4 2 4 5) = 5.663.232	(5 6 1 8 0) = 9.202.816
(5 3 0 8 4) = 4.327.936	(5,5,10,0,0) = 1.853.280	(5 6 0 9 0) = 9.534.080
(5 3 7 0 5) = 6.973.952	(5 5 9 1 0) = 2.463.232	(5 6 8 0 1) = 2.066.752
(5 3 6 1 5) = 8.290.016	(5 5 8 2 0) = 3.271.424	(5 6 7 1 1) = 2.750.208
(5 3 5 2 5) = 8.920.768	(5 5 7 3 0) = 4.340.224	(5 6 6 2 1) = 3.658.752
(5 3 4 3 5) = 8.390.144	(5 5 6 4 0) = 5.749.760	(5 6 5 3 1) = 4.866.048
(5,4,11,0,0) = 2.737.392	(5 5 5 5 0) = 7.601.152	(5 6 4 4 1) = 6.469.632
(5,4,10,1,0) = 3.621.504	(5 5 4 6 0) = 9.774.080	(5 6 3 5 1) = 8.229.376
(5 4 9 2 0) = 5.938.048	(5 5 3 7 0) = 11.864.576	(5 6 2 6 1) = 9.641.984
(5 4 8 3 0) = 6.288.128	(5 5 2 8 0) = 13.347.072	(5 6 1 7 1) = 10.231.296
(5 4 7 4 0) = 8.236.032	(5 5 1 9 0) = 13.839.232	(5 6 0 8 1) = 9.865.344
(5 4 6 5 0) = 10.722.304	(5,5,0,10,0) = 13.508.000	(5 6 7 0 2) = 3.433.664
(5 4 5 6 0) = 13.568.512	(5 5 9 0 1) = 3.073.184	(5 6 6 1 2) = 4.567.296
(5 4 4 7 0) = 16.263.168	(5 5 8 1 1) = 4.079.616	(5 6 5 2 2) = 6.073.344
(5 4 3 8 0) = 18.165.376	(5 5 7 2 1) = 5.409.024	(5 6 4 3 2) = 8.073.216
(5 4 2 9 0) = 18.806.144	(5 5 6 3 1) = 7.159.296	(5 6 3 4 2) = 9.989.120
(5,4,1,10,0) = 18.102.912	(5 5 5 4 1) = 9.452.544	(5 6 2 5 2) = 11.054.592
(5,4,0,11,0) = 16.366.560	(5 5 4 5 1) = 11.947.008	(5 6 1 6 2) = 10.820.608
(5,4,10,0,1) = 4.505.616	(5 5 3 6 1) = 13.955.072	(5 6 0 7 2) = 9.499.392
(5 4 9 1 1) = 5.938.048	(5 5 2 7 1) = 14.829.568	(5 6 6 0 3) = 4.108.928
(5 4 8 2 1) = 7.796.480	(5 5 1 8 1) = 14.331.392	(5 6 5 1 3) = 5.463.552
(5 4 7 3 1) = 10.183.936	(5 5 0 9 1) = 12.776.768	(5 6 4 2 3) = 7.262.208
(5 4 6 4 1) = 13.208.576	(5 5 8 0 2) = 5.086.048	(5 6 3 3 3) = 8.910.848
(5 4 5 5 1) = 16.414.720	(5 5 7 1 2) = 6.738.432	(5 6 2 4 3) = 9.621.504
(5 4 4 6 1) = 18.957.824	(5 5 6 2 2) = 8.909.568	(5 6 1 5 3) = 9.030.144
(5 4 3 7 1) = 20.067.584	(5 5 5 3 2) = 11.745.792	(5 6 0 6 3) = 7.492.096
(5 4 2 8 1) = 19.446.912	(5 5 4 4 2) = 14.441.472	(5 6 5 0 4) = 3.644.416
(5 4 1 9 1) = 17.399.680	(5 5 3 5 2) = 15.963.136	(5 6 4 1 4) = 4.844.544
(5,4,0,10,1) = 14.630.208	(5 5 2 6 2) = 15.704.064	(5 6 3 2 4) = 6.068.224
(5 4 9 0 2) = 7.370.480	(5 5 1 7 2) = 13.833.216	(5 6 2 3 4) = 6.584.320
(5 4 8 1 2) = 9.654.912	(5 5 0 8 2) = 11.229.144	(5 6 1 4 4) = 6.104.064
(5 4 7 2 2) = 12.571.392	(5 5 7 0 3) = 6.058.496	(5 6 0 5 4) = 4.924.928
(5 4 6 3 2) = 16.233.216	(5 5 6 1 3) = 8.008.064	(5 6 4 0 5) = 2.667.008
(5 4 5 4 2) = 19.620.864	(5 5 5 2 3) = 10.552.576	(5 6 3 1 5) = 3.359.744
(5 4 4 5 2) = 21.500.928	(5 5 4 3 3) = 12.866.048	(5 6 2 2 5) = 3.725.312
(5 4 3 6 2) = 21.177.344	(5 5 3 4 3) = 13.890.560	(5 6 1 3 5) = 3.485.696
(5 4 2 7 2) = 18.826.240	(5 5 2 5 3) = 13.130.752	(5 6 0 4 5) = 2.795.008
(5 4 1 8 2) = 15.352.448	(5 5 1 6 3) = 10.938.368	(5 7 8 0 0) = 831.616
(5 4 0 9 2) = 11.860.736	(5 5 0 7 3) = 8.324.352	(5 7 7 1 0) = 1.107.456
(5 4 8 0 3) = 8.664.064	(5 5 6 0 4) = 5.348.672	(5 7 6 2 0) = 1.474.560
(5 4 7 1 3) = 11.269.632	(5 5 5 1 4) = 7.052.928	(5 7 5 3 0) = 1.963.008
(5 4 6 2 3) = 14.531.200	(5 5 4 2 4) = 8.772.864	(5 7 4 4 0) = 2.612.736

(5 7 3 5 0) =	3.476.736	(5 8 3 0 4) =	1.636.864	(5,11,3,0,1) =	275.912
(5 7 2 6 0) =	4.500.736	(5 8 2 1 4) =	2.178.816	(5,11,2,1,1) =	367.104
(5 7 1 7 0) =	5.488.000	(5 8 1 2 4) =	2.732.032	(5,11,1,2,1) =	489.216
(5 7 0 8 0) =	6.179.648	(5 8 0 3 4) =	2.964.992	(5,11,0,3,1) =	651.904
(5 7 7 0 1) =	1.383.296	(5 8 2 0 5) =	1.198.976	(5,11,2,0,2) =	458.752
(5 7 6 1 1) =	1.841.664	(5 8 1 1 5) =	1.511.936	(5,11,1,1,2) =	611.328
(5 7 5 2 1) =	2.451.456	(5 8 0 2 5) =	1.676.800	(5,11,0,2,2) =	814.592
(5 7 4 3 1) =	3.262.464	(5 9 6 0 0) =	371.200	(5,11,1,0,3) =	550.144
(5 7 3 4 1) =	4.340.736	(5 9 5 1 0) =	494.592	(5,11,0,1,3) =	723.056
(5 7 2 5 1) =	5.524.736	(5 9 4 2 0) =	658.944	(5,11,0,0,4) =	488.768
(5 7 1 6 1) =	6.475.264	(5 9 3 3 0) =	877.824	(5,12,3,0,0) =	110.336
(5 7 0 7 1) =	6.871.296	(5 9 2 4 0) =	1.169.280	(5,12,2,1,0) =	147.072
(5 7 6 0 2) =	2.300.032	(5 9 1 5 0) =	1.557.312	(5,12,1,2,0) =	196.032
(5 7 5 1 2) =	3.061.248	(5 9 0 6 0) =	2.017.600	(5,12,0,3,0) =	261.280
(5 7 4 2 2) =	4.073.472	(5 9 5 0 1) =	617.984	(5,12,2,0,1) =	122.624
(5 7 3 3 2) =	5.419.008	(5 9 4 1 1) =	823.296	(5,12,1,1,1) =	163.456
(5 7 2 4 2) =	6.708.736	(5 9 3 2 1) =	1.096.704	(5,12,0,2,1) =	326.528
(5 7 1 5 2) =	7.425.792	(5 9 2 3 1) =	1.460.736	(5,12,1,0,2) =	306.176
(5 7 0 6 2) =	7.267.328	(5 9 1 4 1) =	1.945.344	(5,12,0,1,2) =	408.064
(5 7 5 0 3) =	2.754.304	(5 9 0 5 1) =	2.477.888	(5,12,0,0,3) =	367.232
(5 7 4 1 3) =	3.664.896	(5 9 4 0 2) =	1.028.608	(5,13,2,0,0) =	73.600
(5 7 3 2 3) =	4.875.264	(5 9 3 1 2) =	1.370.112	(5,13,1,1,0) =	98.112
(5 7 2 3 3) =	5.985.280	(5 9 2 2 2) =	1.824.768	(5,13,0,2,0) =	130.784
(5 7 1 4 3) =	6.463.483	(5 9 1 3 2) =	2.429.952	(5,13,0,0,1) =	122.624
(5 7 0 5 3) =	6.064.384	(5 9 0 4 2) =	3.010.432	(5,13,0,1,1) =	163.456
(5 7 4 0 4) =	2.444.288	(5 9 3 0 3) =	1.232.896	(5,13,0,0,2) =	204.288
(5 7 3 1 4) =	3.251.712	(5 9 2 1 3) =	1.641.984	(5,14,1,0,0) =	49.088
(5 7 2 2 4) =	4.075.520	(5 9 1 2 3) =	2.186.496	(5,14,0,1,0) =	65.440
(5 7 1 3 4) =	4.422.656	(5 9 0 3 3) =	2.686.208	(5,14,0,0,1) =	81.812
(5 7 0 4 4) =	4.098.560	(5 9 2 0 4) =	1.094.912	(5,15,0,0,0) =	32.736
(5 7 3 0 5) =	1.789.696	(5 9 1 1 4) =	1.458.048	(6,0,14,0,0) =	3.911.883
(5 7 2 1 5) =	2.255.872	(6 9 0 2 4) =	1.828.864	(6,0,13,1,0) =	4.945.044
(5 7 1 2 5) =	2.501.632	(5 9 1 0 5) =	802.240	(6,0,12,2,0) =	6.170.112
(5 7 0 3 5) =	2.339.840	(5 9 0 1 5) =	1.011.968	(6,0,11,3,0) =	7.578.196
(5 8 7 0 0) =	555.776	(5,10,5,0,0) =	247.808	(6,0,10,4,0) =	9.117.888
(5 8 6 1 0) =	740.352	(5,10,4,1,0) =	330.240	(6,0, 9 5 0) =	10.704.960
(5 8 5 2 0) =	986.112	(5,10,3,2,0) =	440.064	(6,0, 8 6 0) =	12.139.392
(5 8 4 3 0) =	1.313.280	(5,10,2,3,0) =	586.368	(6,0, 7 7 0) =	13.158.144
(5 8 3 4 0) =	1.748.736	(5,10,1,4,0) =	781.248	(6,0, 6 8 0) =	13.537.024
(5 8 2 5 0) =	2.328.192	(5,10,0,5,0) =	1.010.800	(6,0, 5 9 0) =	13.184.640
(5 8 1 6 0) =	3.015.296	(5,10,4,0,1) =	412.672	(6,0, 4,10,0) =	12.174.528
(5 8 0 7 0) =	3.677.888	(5,10,3,1,1) =	549.888	(6,0, 3,11,0) =	10.706.736
(5 8 6 0 1) =	924.928	(5,10,2,2,1) =	732.672	(6,0, 2,12,0) =	9.026.784
(5 8 5 1 1) =	1.231.872	(5,10,1,3,1) =	976.128	(6,0, 1,13,0) =	7.347.024
(5 8 4 2 1) =	1.640.448	(5,10,0,4,1) =	1.300.352	(6,0, 0,14,0) =	5.807.568
(5 8 3 3 1) =	2.184.192	(5,10,3,0,2) =	687.104	(6,0, 13,0,1) =	5.978.265
(5 8 2 4 1) =	2.907.648	(5,10,2,1,2) =	915.456	(6,0, 12,1,1) =	7.395.180
(5 8 1 5 1) =	3.702.400	(5,10,1,2,2) =	1.219.584	(6,0, 11,2,1) =	8.981.280
(5 8 0 6 1) =	4.340.480	(5,10,0,3,2) =	1.624.576	(6,0, 10,3,1) =	10.660.080
(5 8 5 0 2) =	1.538.816	(5,10,2,0,3) =	823.808	(6,0, 9 4 1) =	12.292.032
(5 8 4 1 2) =	2.049.024	(5,10,1,1,3) =	1.097.472	(6,0, 8 5 1) =	13.573.824
(5 8 3 2 2) =	2.727.936	(5,10,0,2,3) =	1.461.888	(6,0, 7 6 1) =	14.176.896
(5 8 2 3 2) =	3.631.104	(5,10,1,0,4) =	731.776	(6,0, 6 7 1) =	13.915.904
(5 8 1 4 2) =	4.497.152	(5,10,0,1,4) =	974.784	(6,0, 5 8 1) =	12.832.256
(5 8 0 5 2) =	4.978.560	(5,10,0,0,5) =	536.288	(6,0, 4 9 1) =	11.164.416
(5 8 4 0 3) =	1.843.712	(5,11,4,0,0) =	165.376	(6,0, 3,10,1) =	9.238.944
(5 8 3 1 3) =	2.454.528	(5,11,3,1,0) =	220.416	(6,0, 2,11,1) =	7.387.280
(5 8 2 2 3) =	3.267.072	(5,11,2,2,0) =	293.760	(6,0, 1,12,1) =	5.667.264
(5 8 1 3 3) =	4.012.544	(5,11,1,3,0) =	391.488	(6,0, 0,13,1) =	4.268.112
(5 8 0 4 3) =	4.333.568	(5,11,0,4,0) =	521.696	(6,0, 12,0,2) =	8.812.095

(6,0,11,1,2) =	10.567.380	(6,1,12,0,1) =	4.561.350	(6 2 9 3 0) =	4.536.192
(6,0,10,2,2) =	12.338.880	(6,1,11,1,1) =	5.809.080	(6 2 8 4 0) =	5.834.112
(6 0 9 3 2) =	13.923.984	(6,1,10,2,1) =	7.302.480	(6 2 7 5 0) =	7.415.040
(6 0 8 4 2) =	14.855.616	(6 1 9 3 1) =	9.028.128	(6 2 6 6 0) =	9.144.832
(6 0 7 5 2) =	14.779.968	(6 1 8 4 1) =	10.924.224	(6 2 5 7 0) =	10.715.904
(6 0 6 6 2) =	13.654.912	(6 1 7 5 1) =	12.669.696	(6 2 4 8 0) =	11.769.600
(6 0 5 7 2) =	11.748.608	(6 1 6 6 1) =	13.788.160	(6 2 3 7 0) =	12.057.984
(6 0 4 8 2) =	9.496.576	(6 1 5 7 1) =	14.062.336	(6,2,2,10,0) =	11.548.128
(6 0 3 9 2) =	7.313.472	(6 1 4 8 1) =	13.318.272	(6,2,1,11,0) =	10.416.816
(6,0,2,10,2) =	5.485.824	(6 1 3 9 1) =	11.803.680	(6,2,0,12,0) =	8.941.344
(6,0,1,11,2) =	3.987.692	(6,1,2,10,1) =	9.887.856	(6,2,11,0,1) =	3.313.620
(6,0,0,12,2) =	2.868.960	(6,1,1,11,1) =	7.930.368	(6,2,10,1,1) =	4.315.680
(6,0,11,0,3) =	9.299.610	(6,1,0,12,1) =	6.155.856	(6 2 9 2 1) =	5.576.832
(6,0,10,1,3) =	10.786.080	(6,1,11,0,2) =	7.056.810	(6 2 8 3 1) =	7.132.032
(6 0 9 2 3) =	12.060.328	(6,1,10,1,2) =	8.796.880	(6 2 7 4 1) =	8.995.968
(6 0 8 3 3) =	12.674.880	(6 1 9 2 2) =	10.753.776	(6 2 6 5 1) =	10.874.624
(6 0 7 4 3) =	12.308.640	(6 1 8 3 2) =	12.820.320	(6 2 5 6 1) =	12.286.976
(6 0 6 5 3) =	10.988.736	(6 1 7 4 2) =	14.415.168	(6 2 4 7 1) =	12.823.296
(6 0 5 6 3) =	9.049.344	(6 1 6 5 2) =	14.915.840	(6 2 3 8 1) =	12.346.368
(6 0 4 7 3) =	6.948.864	(6 1 5 6 2) =	14.299.648	(6 2 2 9 1) =	11.038.272
(6 0 3 8 3) =	5.069.440	(6 1 4 7 2) =	12.574.208	(6,2,1,10,1) =	9.287.504
(6 0 2 9 3) =	3.595.968	(6 1 3 8 2) =	10.289.088	(6,2,0,11,1) =	7.465.872
(6,0,1,10,3) =	2.520.672	(6 1 2 9 2) =	7.972.032	(6,2,10,0,2) =	5.317.740
(6,0,0,11,3) =	1.750.224	(6,1,1,10,2) =	5.972.880	(6 2 9 1 2) =	6.837.984
(6,0,10,0,4) =	7.386.100	(6,1,0,11,2) =	4.381.344	(6 2 8 2 2) =	8.687.232
(6 0 9 1 4) =	8.161.436	(6,1,1,10,3) =	7.813.140	(6 2 7 3 2) =	10.859.904
(6 0 8 2 4) =	8.620.880	(6 1 9 1 3) =	9.511.812	(6 2 6 4 2) =	12.753.280
(6 0 7 3 4) =	8.348.880	(6 1 8 2 3) =	11.273.744	(6 2 5 5 2) =	13.699.328
(6 0 6 4 4) =	7.357.152	(6 1 7 3 3) =	12.525.024	(6 2 4 6 2) =	13.359.616
(6 0 5 5 4) =	5.920.512	(6 1 6 4 3) =	12.725.376	(6 2 3 7 2) =	11.819.440
(6 0 4 6 4) =	4.404.864	(6 1 5 5 3) =	11.739.264	(6 2 2 8 2) =	9.730.176
(6 0 3 7 4) =	3.098.624	(6 1 4 6 3) =	9.865.728	(6 2 1 9 2) =	7.532.736
(6 0 2 8 4) =	2.122.496	(6 1 3 7 3) =	7.645.568	(6,2,0,10,2) =	5.646.240
(6 0 1 9 4) =	1.445.376	(6 1 2 8 3) =	5.590.464	(6 2 9 0 3) =	6.114.448
(6,0,0,10,4) =	979.776	(6 1 1 9 3) =	3.973.728	(6 2 8 1 3) =	7.749.920
(6 0 9 0 5) =	8.925.540	(6,1,0,10,3) =	2.789.808	(6 2 7 2 3) =	9.656.896
(6 0 8 1 5) =	4.898.216	(6 1 9 0 4) =	6.410.764	(6 2 6 3 3) =	11.227.968
(6 0 7 2 5) =	4.797.216	(6 1 8 1 4) =	7.615.976	(6 2 5 4 3) =	11.796.096
(6 0 6 3 5) =	4.233.840	(6 1 7 2 4) =	8.548.816	(6 2 4 5 3) =	11.103.744
(6 0 5 4 5) =	3.381.888	(6 1 6 3 4) =	8.648.640	(6 2 3 6 3) =	9.401.344
(6 0 4 5 5) =	2.477.376	(6 1 5 4 4) =	7.933.632	(6 2 2 7 3) =	7.268.352
(6 0 3 6 5) =	1.707.520	(6 1 4 5 4) =	6.517.632	(6 2 1 8 3) =	5.292.288
(6 0 2 7 5) =	1.146.368	(6 1 3 6 4) =	4.887.808	(6 2 0 9 3) =	3.759.744
(6 0 1 8 5) =	768.256	(6 1 2 7 4) =	3.472.384	(6 2 8 0 4) =	5.205.552
(6 0 0 9 5) =	514.176	(6 1 1 8 4) =	2.356.992	(6 2 7 1 4) =	6.500.352
(6 0 8 0 6) =	2.449.108	(6 1 0 9 4) =	1.605.888	(6 2 6 2 4) =	7.671.008
(6,1,13,0,0) =	2.878.602	(6 1 8 0 5) =	4.271.412	(6 2 5 3 4) =	9.090.304
(6,1,12,1,0) =	3.719.976	(6 1 7 1 5) =	4.830.184	(6 2 4 4 4) =	7.537.152
(6,1,11,2,0) =	4.764.528	(6 1 6 2 5) =	4.989.024	(6 2 3 5 4) =	6.232.064
(6,1,10,3,0) =	6.033.504	(6 1 5 3 5) =	4.575.840	(6 2 2 6 4) =	4.651.520
(6 1 9 4 0) =	7.530.816	(6 1 4 4 5) =	3.736.512	(6 2 1 7 4) =	3.251.712
(6 1 8 5 0) =	9.227.520	(6 1 3 5 5) =	2.758.784	(6 2 0 8 4) =	2.227.200
(6 1 7 6 0) =	10.948.608	(6 1 2 6 5) =	1.399.520	(6 2 7 0 5) =	3.621.248
(6 1 6 7 0) =	12.374.528	(6 1 1 7 5) =	1.275.392	(6 2 6 1 5) =	4.455.776
(6 1 5 8 0) =	13.224.576	(6 1 0 8 5) =	854.784	(6 2 5 2 5) =	4.628.576
(6 1 4 9 0) =	13.271.424	(6 1 7 0 6) =	2.397.108	(6 2 4 3 5) =	4.343.040
(6,1,3,10,0) =	12.537.552	(6 1 6 1 6) =	2.494.512	(6 2 3 4 5) =	3.570.688
(6,1,2,11,0) =	11.212.704	(6,2,12,0,0) =	2.037.228	(6 2 2 5 5) =	2.621.696
(6,1,1,12,0) =	9.571.526	(6,2,11,1,0) =	2.675.424	(6 2 1 6 5) =	1.792.000
(6,1,0,13,0) =	7.863.696	(6,2,10,2,0) =	3.495.552	(6 2 0 7 5) =	1.202.688

(6 2 6 0 6) =	2.116.920	(6 3 5 0 6) =	1.690.944	(6 5 9 0 0) =	629.856
(6 2 5 1 6) =	2.287.920	(6 3 4 1 6) =	1.668.256	(6 5 8 1 0) =	839.808
(6 2 4 2 6) =	2.171.520	(6 3 3 2 6) =	1.785.344	(6 5 7 2 0) =	1.118.744
(6,3,11,0,0) =	1.899.032	(6 3 2 3 6) =	1.466.496	(6 5 6 3 0) =	1.494.992
(6,3,10,1,0) =	1.855.296	(6,4,10,0,0) =	942.768	(6 5 5 4 0) =	1.994.656
(6 3 9 2 0) =	2.454.912	(6 4 9 1 0) =	2.555.680	(6 5 4 5 0) =	2.654.208
(6 3 8 3 0) =	3.238.272	(6 4 8 2 0) =	1.671.552	(6 5 3 6 0) =	3.442.176
(6 3 7 4 0) =	4.253.184	(6 4 7 3 0) =	2.223.360	(6 5 2 7 0) =	4.202.496
(6 3 6 5 0) =	5.552.640	(6 4 6 4 0) =	2.953.728	(6 5 1 8 0) =	4.734.720
(6 3 5 6 0) =	7.043.328	(6 4 5 5 0) =	3.916.800	(6 5 0 9 0) =	4.905.088
(6 3 4 7 0) =	8.455.680	(6 4 4 6 0) =	5.050.368	(6 5 8 0 1) =	1.049.760
(6 3 3 8 0) =	9.451.584	(6 4 3 7 0) =	6.142.464	(6 5 7 1 1) =	1.399.680
(6 3 2 9 0) =	9.784.512	(6 4 2 8 0) =	6.916.608	(6 5 6 2 1) =	1.866.240
(6,3,1,10,0) =	9.413.472	(6 4 1 9 0) =	7.172.160	(6 5 5 3 1) =	2.488.320
(6,3,0,11,0) =	8.504.704	(6,4,0,10,0) =	6.994.888	(6 5 4 4 1) =	3.317.760
(6,3,10,0,1) =	2.311.560	(6 4 9 0 1) =	1.568.592	(6 5 3 5 1) =	4.230.144
(6 3 9 1 1) =	3.054.528	(6 4 8 1 1) =	2.087.424	(6 5 2 6 1) =	4.962.816
(6 3 8 2 1) =	4.021.632	(6 4 7 2 1) =	2.775.168	(6 5 1 7 1) =	5.266.944
(6 3 7 3 1) =	5.268.096	(6 4 6 3 1) =	3.684.096	(6 5 0 8 1) =	5.075.456
(6 3 6 4 1) =	6.852.096	(6 4 5 4 1) =	4.879.872	(6 5 7 0 2) =	1.749.600
(6 3 5 5 1) =	8.534.016	(6 4 4 5 1) =	6.183.936	(6 5 6 1 2) =	2.332.800
(6 3 4 6 1) =	9.735.936	(6 4 3 6 1) =	7.234.560	(6 5 5 2 2) =	3.110.400
(6 3 3 7 1) =	10.447.488	(6 4 2 7 1) =	7.690.752	(6 5 4 3 2) =	4.147.200
(6 3 2 8 1) =	10.117.440	(6 4 1 8 1) =	7.427.712	(6 5 3 4 2) =	5.142.528
(6 3 1 9 1) =	9.042.432	(6 4 0 9 1) =	6.615.616	(6 5 2 5 2) =	5.695.488
(6,3,0,10,1) =	7.595.936	(6 4 8 0 2) =	2.606.256	(6 5 1 6 2) =	5.571.072
(6 3 9 0 2) =	3.797.496	(6 4 7 1 2) =	3.462.912	(6 5 0 7 2) =	4.884.468
(6 3 8 1 2) =	4.988.736	(6 4 6 2 2) =	4.593.024	(6 5 6 0 3) =	2.099.520
(6 3 7 2 2) =	6.514.560	(6 4 5 3 2) =	6.085.648	(6 5 5 1 3) =	2.799.360
(6 3 6 3 2) =	8.431.096	(6 4 4 4 2) =	6.674.688	(6 5 4 2 3) =	3.732.480
(6 3 5 4 2) =	10.215.936	(6 4 3 5 2) =	8.285.184	(6 5 3 3 3) =	4.589.568
(6 3 4 5 2) =	11.202.048	(6 4 2 6 2) =	8.146.944	(6 5 2 4 3) =	4.958.208
(6 3 3 6 2) =	11.026.944	(6 4 1 7 2) =	7.164.672	(6 5 1 5 3) =	4.647.936
(6 3 2 7 2) =	9.787.392	(6 4 0 8 2) =	5.803.520	(6 5 0 6 3) =	3.848.704
(6 3 1 8 2) =	7.967.424	(6 4 7 0 3) =	3.115.008	(6 5 5 0 4) =	1.866.240
(6 3 0 9 2) =	6.149.440	(6 4 6 1 3) =	4.130.496	(6 5 4 1 4) =	2.488.320
(6 3 8 0 3) =	4.478.976	(6 4 5 2 3) =	5.461.632	(6 5 3 2 4) =	3.124.224
(6 3 7 1 3) =	6.524.256	(6 4 4 3 3) =	6.674.688	(6 5 2 3 4) =	3.391.488
(6 3 6 2 3) =	7.555.392	(6 4 3 4 3) =	7.211.520	(6 5 1 4 4) =	3.139.584
(6 3 5 3 3) =	9.068.544	(6 4 2 5 3) =	6.810.624	(6 5 0 5 4) =	2.527.232
(6 3 4 4 3) =	9.720.576	(6 4 1 6 3) =	5.660.160	(6 5 4 0 5) =	1.368.576
(6 3 3 5 3) =	9.216.000	(6 4 0 7 3) =	4.612.736	(6 5 3 1 5) =	1.728.000
(6 3 2 6 3) =	7.764.480	(6 4 6 0 4) =	2.757.024	(6 5 2 2 5) =	1.916.928
(6 3 1 7 3) =	5.932.416	(6 4 5 1 4) =	3.647.808	(6 5 1 3 5) =	1.790.996
(6 3 0 8 3) =	4.302.784	(6 4 4 2 4) =	4.549.248	(6 5 0 4 5) =	1.432.576
(6 3 7 0 4) =	3.910.752	(6 4 3 3 4) =	4.942.080	(6 5 3 0 6) =	853.760
(6 3 6 1 4) =	5.064.480	(6 4 2 4 4) =	4.762.608	(6 5 2 1 6) =	699.760
(6 3 5 2 4) =	6.190.848	(6 4 1 5 4) =	3.726.336	(6 5 1 2 6) =	896.000
(6 3 4 3 4) =	6.671.232	(6 4 0 6 4) =	2.722.816	(6 5 0 3 6) =	721.280
(6 3 3 4 4) =	6.257.664	(6 4 5 0 5) =	2.010.528	(6 6 8 0 0) =	419.904
(6 3 2 5 4) =	5.137.920	(6 4 4 1 5) =	2.523.456	(6 6 7 1 0) =	559.872
(6 3 1 6 4) =	3.777.792	(6 4 3 2 5) =	2.802.816	(6 6 6 2 0) =	746.496
(6 3 0 7 4) =	2.630.144	(6 4 2 3 5) =	2.638.080	(6 6 5 3 0) =	995.328
(6 3 6 0 5) =	2.804.112	(6 4 1 4 5) =	2.116.608	(6 6 4 4 0) =	1.327.104
(6 3 5 1 5) =	3.452.544	(6 4 0 5 5) =	1.519.616	(6 6 3 5 0) =	1.769.972
(6 3 4 2 5) =	3.801.024	(6 4 4 0 6) =	1.238.688	(6 6 2 6 0) =	2.294.784
(6 3 3 3 5) =	5.450.240	(6 4 3 1 6) =	1.379.392	(6 6 1 7 0) =	2.801.664
(6 3 2 4 5) =	2.932.992	(6 4 2 2 6) =	1.310.848	(6 6 0 8 0) =	3.156.480
(6 3 1 5 5) =	2.118.144	(6 4 1 3 6) =	1.059.072	(6 6 7 0 1) =	. 699.840
(6 3 0 6 5) =	1.442.560	(6 4 0 4 6) =	759.808	(6 6 6 1 1) =	933.120

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(6 6 5 2 1) =	1.244.160	(6 7 1 4 2) =	2.285.568	(6 9 4 0 1) =	207.360
(6 6 4 3 1) =	1.658.880	(6 7 0 5 2) =	962.880	(6 9 3 1 1) =	276.480
(6 6 3 4 1) =	2.211.840	(6 7 4 0 3) =	933.120	(6 9 2 2 1) =	368.640
(6 6 2 5 1) =	2.820.096	(6 7 3 1 3) =	1.244.160	(6 9 1 3 1) =	491.520
(6 6 1 6 1) =	3.308.544	(6 7 2 2 3) =	1.658.880	(6 9 0 4 1) =	655.360
(6 6 0 7 1) =	3.511.296	(6 7 1 3 3) =	2.039.808	(6 9 3 0 2) =	345.600
(6 6 6 0 2) =	1.166.400	(6 7 0 4 3) =	1.018.368	(6 9 2 1 2) =	460.800
(6 6 5 1 2) =	1.555.200	(6 7 3 0 4) =	829.440	(6 9 1 2 2) =	614.400
(6 6 4 2 2) =	2.073.000	(6 7 2 1 4) =	1.105.920	(6 9 0 3 2) =	819.200
(6 6 3 3 2) =	2.764.800	(6 7 1 2 4) =	1.388.544	(6 9 2 0 3) =	414.720
(6 6 2 4 2) =	3.428.352	(6 7 0 3 4) =	1.250.560	(6 9 1 1 3) =	552.960
(6 6 1 5 2) =	3.796.992	(6 7 2 0 5) =	608.256	(6 9 0 2 3) =	737.280
(6 6 0 6 2) =	3.714.048	(6 7 1 1 5) =	768.000	(6 9 1 0 4) =	368.640
(6 6 5 0 3) =	1.399.680	(6 7 0 2 5) =	1.544.192	(6 9 0 1 4) =	491.520
(6 6 4 1 3) =	1.866.240	(6 7 1 0 6) =	384.128	(6 9 0 0 5) =	270.336
(6 6 3 2 3) =	2.488.320	(6 7 0 1 6) =	427.392	(6,10,4,0,0) =	12.944
(6 6 2 3 3) =	3.059.712	(6 8 6 0 0) =	186.624	(6,10,3,1,0) =	110.592
(6 6 1 4 3) =	3.305.472	(6 8 5 1 0) =	448.832	(6,10,2,2,0) =	147.456
(6 6 0 5 3) =	3.098.624	(6 8 4 2 0) =	331.776	(6,10,1,3,0) =	196.608
(6 6 4 0 4) =	1.244.160	(6 8 3 3 0) =	442.368	(6,10,0,4,0) =	262.144
(6 6 3 1 4) =	1.658.880	(6 8 2 4 0) =	589.824	(6,10,3,0,1) =	138.468
(6 6 2 2 4) =	2.082.816	(6 8 1 5 0) =	786.432	(6,10,2,1,1) =	184.320
(6 6 1 3 4) =	2.260.992	(6 8 0 6 0) =	1.019.904	(6,10,1,2,1) =	245.760
(6 6 0 4 4) =	2.093.056	(6 8 5 0 1) =	311.040	(6,10,0,3,1) =	307.200
(6 6 3 0 5) =	912.344	(6 8 4 1 1) =	414.720	(6,10,2,0,2) =	230.400
(6 6 2 1 5) =	1.152.000	(6 8 3 2 1) =	552.960	(6,10,1,1,2) =	307.200
(6 6 1 2 5) =	1.277.952	(6 8 2 3 1) =	737.280	(6,10,0,2,2) =	409.600
(6 6 0 3 5) =	1.193.984	(6 8 1 4 1) =	983.040	(6,10,1,0,3) =	276.480
(6 6 2 0 6) =	573.184	(6 8 0 5 1) =	1.253.376	(6,10,0,1,3) =	368.640
(6 6 1 1 6) =	637.696	(6 8 4 0 2) =	518.400	(6,10,0,0,4) =	245.760
(6 6 0 2 6) =	601.344	(6 8 3 1 2) =	691.200	(6,11,3,0,0) =	55.296
(6 7 7 0 0) =	279.936	(6 8 2 2 2) =	921.600	(6,11,2,1,0) =	73.728
(6 7 6 1 0) =	373.248	(6 8 1 3 2) =	1.228.800	(6,11,1,2,0) =	98.304
(6 7 5 2 0) =	497.664	(6 8 0 4 2) =	1.523.712	(6,11,0,3,0) =	131.072
(6 7 4 3 0) =	663.552	(6 8 3 0 3) =	622.080	(6,11,2,0,1) =	92.160
(6 7 3 4 0) =	884.736	(6 8 2 1 3) =	829.440	(6,11,1,1,1) =	122.780
(6 7 2 5 0) =	1.179.648	(6 8 1 2 3) =	1.105.920	(6,11,0,2,1) =	163.840
(6 7 1 6 0) =	1.529.856	(6 8 0 3 3) =	1.359.872	(6,11,1,0,2) =	153.600
(6 7 0 7 0) =	444.640	(6 8 2 0 4) =	552.960	(6,11,0,1,2) =	204.800
(6 7 6 0 1) =	466.560	(6 8 1 1 4) =	809.280	(6,11,0,0,3) =	184.320
(6 7 5 1 1) =	722.080	(6 8 0 2 4) =	925.696	(6,12,2,0,0) =	36.864
(6 7 4 2 1) =	829.440	(6 8 1 0 5) =	405.504	(6,12,1,1,0) =	49.152
(6 7 3 3 1) =	1.105.920	(6 8 0 1 5) =	512.000	(6,12,0,2,0) =	65.536
(6 7 2 4 1) =	1.474.560	(6 8 0 0 6) =	256.000	(6,12,1,0,1) =	61.440
(6 7 1 5 1) =	1.880.064	(6 9 5 0 0) =	124.416	(6,12,0,1,1) =	81.920
(6 7 0 6 1) =	772.736	(6 9 4 1 0) =	165.888	(6,12,0,0,2) =	102.400
(6 7 5 0 2) =	777.600	(6 9 3 2 0) =	221.184	(6,13,1,0,0) =	24.576
(6 7 4 1 2) =	1.036.800	(6 9 2 3 0) =	294.912	(6,13,0,1,0) =	32.768
(6 7 3 2 2) =	1.382.400	(6 9 1 4 0) =	391.216	(6,13,0,0,1) =	40.960
(6 7 2 3 2) =	1.843.200	(6 9 0 5 0) =	524.288	(6,14,0,0,0) =	16.384

Tengevolge van de formules heeft men verder:

$$(p+1, q, r, s, t) = \\ = \frac{1}{2}(p, q+1, r, s, t) \text{ voor } p \geq 6.$$

Delft, Januari 1905.

A. TOXOPEUS.