

数 表

単純リ-環の既約表現の次元

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数表の見方 複素単純リ-環で, その rank および, highest weight が十分小さい場合の有限次既約正則表現の次元の表である. たとえば, $B(m_1, m_2, m_3)$ は, rank 3 の B 型のリ-環 (すなわち $sp(3, \mathbb{C})$) の, highest weight が $m_1 \bar{\omega}_1 + m_2 \bar{\omega}_2 + m_3 \bar{\omega}_3$ の既約正則表現の次元である. ただし, $\bar{\omega}_i$ は, i -番目の基本 weight で, 番号の付け方は, Dynkin 図式に示してある. これは, Bourbaki の代数第 6 章の表と同じである. $B(2, 0, 1) = 168 = (2 \ 3) (3 \ 1) (7 \ 1)$ とあるが, $(2 \ 3) (3 \ 1) (7 \ 1)$ は $2^3 \cdot 3^1 \cdot 7^1$ の意味である.

その他 1. 次回は weight の multiplicity 等を予定している.

2. rank l の複素半単純リ-環の基本 weight を, $\bar{\omega}_1, \dots, \bar{\omega}_l$, 正の roots の数を $2N$ とするとき, 任意の自

然数 m に対し, $m\bar{\omega}_1 + \dots + m\bar{\omega}_r$ を highest weight とする
正則既約表現の次元は $(m+1)^N$ という単純な形になる
が, これには何か意味があるか?

3 $(\mathfrak{g}, \mathfrak{k})$ を, 非コンパクト型リーマン対称対とし,
 $\mathfrak{g}$ の Cartan 分解を $\mathfrak{g} = \mathfrak{k} + \mathfrak{p}$, $\mathfrak{p}$ の極大 $\mathbb{A}$ -ベクトル部分空
間の1つを $\mathfrak{a}_{\mathfrak{p}}$ とおく. $\mathfrak{k}$ に関し class 1 の $\mathfrak{g}$ の既約な
複素有限次表現の highest weight Λ は, 自然に $\mathfrak{a}_{\mathfrak{p}}$ の相対 $\mathfrak{a}_{\mathfrak{p}}^*$
の元とみなせ, しかも

$$(1) \quad \frac{\langle \Lambda, \alpha \rangle}{\langle \alpha, \alpha \rangle} \in \{0, 1, 2, \dots\} \quad \left(\alpha \text{ は, } (\mathfrak{g}, \mathfrak{a}_{\mathfrak{p}}) \text{ の任} \right. \\ \left. \text{意の正の root} \right)$$

を満たすことと特徴づけられる (cf. G. Warner: Harmonic
Analysis on Semi-Simple Lie Groups I, Theorem 3.3.1.1).
このときの表現空間の次元 d_{Λ} は, 対応するリーマン対
称空間 G/K の C -函数 $C(\lambda)$ を用いて

$$(2) \quad d_{\Lambda} = \lim_{t \rightarrow -1} \frac{C(\rho t)}{C(\rho t - \Lambda) C(\rho + \Lambda)}$$

と与えられる (証明は後で).

$\mathfrak{k}$ に関し class 1 の既約表現の次元を求めると, $\mathfrak{g}_{\mathbb{C}}$
の rank に比べて G/K の rank が小さい場合は, (2) を使う

に便利である。(たとえば, $(g, \mathfrak{h}) = (\mathrm{FII}, \mathfrak{so}(9))$)

$c(\lambda)$ は, Gindikin-Karpelevič の公式からわかる.

また, $\mathfrak{g}$ が複素半単純リ-環で, $\mathfrak{h}$ がそのコンパクト実型の場合, (2) は Weyl の次元公式になる. 従って, 以下より Weyl の次元公式の別証が得られる.

$G_{\mathbb{C}}$ を $\mathfrak{g}$ の複素化に対応する単連結複素リ-群, U を K を含むコンパクト実型とする. G/K の帯球函数は, σ_p^* の複素化の元として parametrize されるので, それを ϕ_{λ} とおく. このとき, 問題の有限次元表現に対応する帯球函数は, $\phi_{\rho+\Lambda}$ であるが, それは $G_{\mathbb{C}}$ 上の正則函数に拡張されるので同じ記号で表わす. すると, $\phi_{\rho+\Lambda}|_U$ は U/K の帯球函数になる. χ_{Λ} に対応する表現の指標, ρ を $(\mathfrak{g}, \sigma_p)$ の重数度を含めた正の roots の和の半分, w^* を $(\mathfrak{g}, \sigma_p)$ の Weyl 群 $W(\sigma)$ の長さが最大の元とする. さて, 一般に

$$(3) \quad \phi_{\lambda} \cdot \phi_{\rho+\Lambda} = a(\lambda) \phi_{\lambda-\Lambda^*} + \cdots + b(\lambda) \phi_{\lambda+\Lambda}$$

表わせる. ここで, $a(\lambda), b(\lambda)$ は λ の有理函数で,
 .. の部分には, integral な μ で, $\Lambda > \mu > -\Lambda^*$ ($\mu \geq 0$)
 には, μ が $(\mathfrak{g}, \sigma_p)$ の正の roots の非負 1 次結合で表

めせること)を満たす $\phi_{\lambda+\mu}$ の 1 次結合である。また、
 $\Lambda^* = -w^*\Lambda$ とおいた。 $\lambda = \rho + \Lambda^*$ とおき、(3) を U 上で
 積分すると、

$$\text{左辺} = \int_U \phi_{\rho+\Lambda^*}(g) \phi_{\rho+\Lambda}(g) dg = \int_U \overline{\chi_{\Lambda}(g)} \phi_{\rho+\Lambda}(g) dg = d_{\Lambda}^{-1}$$

$$\text{右辺} = \int_U a(\rho+\Lambda^*) dg = a(\rho+\Lambda^*) \quad (\phi_{\rho} \equiv 1)$$

従って、

$$(4) \quad d_{\Lambda} = a(\rho+\Lambda^*)^{-1}$$

が得られる。 $\operatorname{Re} \lambda > 0$ として、無限遠での増大度を比べて、

$$(5) \quad c(\lambda) \cdot c(\rho+\Lambda) = b(\lambda) \cdot c(\lambda+\Lambda)$$

となる。一方、 λ を $w^*\lambda$ に置き換えて、 $\phi_{\lambda} = \phi_{w^*\lambda}$ に注意
 すると、

$$\phi_{\lambda} \cdot \phi_{\rho+\Lambda} = a(w^*\lambda) \phi_{\lambda+\Lambda} + \cdots + b(w^*\lambda) \phi_{\lambda-\Lambda^*}$$

となり、(3) と比較して、

$$(6) \quad a(w^*\lambda) = b(\lambda)$$

がわかる。(5), (6) より

$$\begin{aligned} a(\lambda) &= b(w^*\lambda) = \frac{c(w^*\lambda) c(\rho+\Lambda)}{c(w^*\lambda+\Lambda)} \\ &= \frac{c(-\lambda) c(\rho+\Lambda)}{c(\Lambda^* - \lambda)} \end{aligned}$$

を得、(4) より (2) がわかる。

$$A(0\ 1) = 3 = (3\ 1)$$

$$A(1\ 0) = 3 = (3\ 1)$$



$$A(0\ 2) = 6 = (2\ 1)(3\ 1)$$

$$A(1\ 1) = 8 = (2\ 3)$$

$$A(2\ 0) = 6 = (2\ 1)(3\ 1)$$

$$A(0\ 3) = 10 = (2\ 1)(5\ 1)$$

$$A(1\ 2) = 15 = (3\ 1)(5\ 1)$$

$$A(2\ 1) = 15 = (3\ 1)(5\ 1)$$

$$A(3\ 0) = 10 = (2\ 1)(5\ 1)$$

$$A(0\ 4) = 15 = (3\ 1)(5\ 1)$$

$$A(1\ 3) = 24 = (2\ 3)(3\ 1)$$

$$A(2\ 2) = 27 = (3\ 3)$$

$$A(3\ 1) = 24 = (2\ 3)(3\ 1)$$

$$A(4\ 0) = 15 = (3\ 1)(5\ 1)$$

$$A(0\ 5) = 21 = (3\ 1)(7\ 1)$$

$$A(1\ 4) = 35 = (5\ 1)(7\ 1)$$

$$A(2\ 3) = 42 = (2\ 1)(3\ 1)(7\ 1)$$

$$A(3\ 2) = 42 = (2\ 1)(3\ 1)(7\ 1)$$

$$A(4\ 1) = 35 = (5\ 1)(7\ 1)$$

$$A(5\ 0) = 21 = (3\ 1)(7\ 1)$$

$$A(0\ 6) = 28 = (2\ 2)(7\ 1)$$

$$A(1\ 5) = 48 = (2\ 4)(3\ 1)$$

$$A(2\ 4) = 60 = (2\ 2)(3\ 1)(5\ 1)$$

$$A(3\ 3) = 64 = (2\ 6)$$

$$A(4\ 2) = 60 = (2\ 2)(3\ 1)(5\ 1)$$

$$A(5\ 1) = 48 = (2\ 4)(3\ 1)$$

$$A(6\ 0) = 28 = (2\ 2)(7\ 1)$$

$$A(0\ 7) = 36 = (2\ 2)(3\ 2)$$

$$A(1\ 6) = 63 = (3\ 2)(7\ 1)$$

$$A(2\ 5) = 81 = (3\ 4)$$

$$A(3\ 4) = 90 = (2\ 1)(3\ 2)(5\ 1)$$

$$A(4\ 3) = 90 = (2\ 1)(3\ 2)(5\ 1)$$

$$A(5\ 2) = 81 = (3\ 4)$$

$$A(6\ 1) = 63 = (3\ 2)(7\ 1)$$

$$A(7\ 0) = 36 = (2\ 2)(3\ 2)$$

$$A(0\ 8) = 45 = (3\ 2)(5\ 1)$$

$$A(1\ 7) = 80 = (2\ 4)(5\ 1)$$

$$A(2\ 6) = 105 = (3\ 1)(5\ 1)(7\ 1)$$

$$A(3\ 5) = 120 = (2\ 3)(3\ 1)(5\ 1)$$

$$A(4\ 4) = 125 = (5\ 3)$$

$$A(5\ 3) = 120 = (2\ 3)(3\ 1)(5\ 1)$$

$$A(6\ 2) = 105 = (3\ 1)(5\ 1)(7\ 1)$$

$$A(7\ 1) = 80 = (2\ 4)(5\ 1)$$

$$A(8\ 0) = 45 = (3\ 2)(5\ 1)$$

$$A(0\ 9) = 55 = (5\ 1)(11\ 1)$$

$$A(1\ 8) = 99 = (3\ 2)(11\ 1)$$

$$A(2\ 7) = 132 = (2\ 2)(3\ 1)(11\ 1)$$

$$A(3\ 6) = 154 = (2\ 1)(7\ 1)(11\ 1)$$

$$A(4\ 5) = 165 = (3\ 1)(5\ 1)(11\ 1)$$

$$A(5\ 4) = 165 = (3\ 1)(5\ 1)(11\ 1)$$

$$A(6\ 3) = 154 = (2\ 1)(7\ 1)(11\ 1)$$

$$A(7\ 2) = 132 = (2\ 2)(3\ 1)(11\ 1)$$

$$A(8\ 1) = 99 = (3\ 2)(11\ 1)$$

$$A(9\ 0) = 55 = (5\ 1)(11\ 1)$$

$$B(0\ 1) = 4 = (2\ 2)$$

$$B(1\ 0) = 5 = (5\ 1)$$



$$B(0\ 2) = 10 = (2\ 1)(5\ 1)$$

$$B(1\ 1) = 16 = (2\ 4)$$

$$B(2\ 0) = 14 = (2\ 1)(7\ 1)$$

$$B(0\ 3) = 20 = (2\ 2)(5\ 1)$$

$$B(1\ 2) = 35 = (5\ 1)(7\ 1)$$

$$B(2\ 1) = 40 = (2\ 3)(5\ 1)$$

$$B(3\ 0) = 30 = (2\ 1)(3\ 1)(5\ 1)$$

$$B(0\ 4) = 35 = (5\ 1)(7\ 1)$$

$$B(1\ 3) = 64 = (2\ 6)$$

$$B(2\ 2) = 81 = (3\ 4)$$

$$B(3\ 1) = 80 = (2\ 4)(5\ 1)$$

$$B(4\ 0) = 55 = (5\ 1)(11\ 1)$$

$$B(0\ 5) = 56 = (2\ 3)(7\ 1)$$

$$B(1\ 4) = 105 = (3\ 1)(5\ 1)(7\ 1)$$

$$B(2\ 3) = 140 = (2\ 2)(5\ 1)(7\ 1)$$

$$B(3\ 2) = 154 = (2\ 1)(7\ 1)(11\ 1)$$

$$B(4\ 1) = 140 = (2\ 2)(5\ 1)(7\ 1)$$

$$B(5\ 0) = 91 = (7\ 1)(13\ 1)$$

$$B(0\ 6) = 84 = (2\ 2)(3\ 1)(7\ 1)$$

$$B(1\ 5) = 160 = (2\ 5)(5\ 1)$$

$$B(2\ 4) = 220 = (2\ 2)(5\ 1)(11\ 1)$$

$$B(3\ 3) = 256 = (2\ 8)$$

$$B(4\ 2) = 260 = (2\ 2)(5\ 1)(13\ 1)$$

$$B(5\ 1) = 224 = (2\ 5)(7\ 1)$$

$$B(6\ 0) = 140 = (2\ 2)(5\ 1)(7\ 1)$$

$$B(0\ 7) = 120 = (2\ 3)(3\ 1)(5\ 1)$$

$$B(1\ 6) = 231 = (3\ 1)(7\ 1)(11\ 1)$$

$$B(2\ 5) = 324 = (2\ 2)(3\ 4)$$

$$B(3\ 4) = 390 = (2\ 1)(3\ 1)(5\ 1)(13\ 1)$$

$$B(4\ 3) = 420 = (2\ 2)(3\ 1)(5\ 1)(7\ 1)$$

$$B(5\ 2) = 405 = (3\ 4)(5\ 1)$$

$$B(6\ 1) = 336 = (2\ 4)(3\ 1)(7\ 1)$$

$$B(7\ 0) = 204 = (2\ 2)(3\ 1)(17\ 1)$$

$$B(0\ 8) = 165 = (3\ 1)(5\ 1)(11\ 1)$$

$$B(1\ 7) = 320 = (2\ 6)(5\ 1)$$

$$B(2\ 6) = 455 = (5\ 1)(7\ 1)(13\ 1)$$

$$B(3\ 5) = 560 = (2\ 4)(5\ 1)(7\ 1)$$

$$B(4\ 4) = 625 = (5\ 4)$$

$$B(5\ 3) = 640 = (2\ 7)(5\ 1)$$

$$B(6\ 2) = 595 = (5\ 1)(7\ 1)(17\ 1)$$

$$B(7\ 1) = 480 = (2\ 5)(3\ 1)(5\ 1)$$

$$B(8\ 0) = 285 = (3\ 1)(5\ 1)(19\ 1)$$

$$B(0\ 9) = 220 = (2\ 2)(5\ 1)(11\ 1)$$

$$B(1\ 8) = 429 = (3\ 1)(11\ 1)(13\ 1)$$

$$B(2\ 7) = 616 = (2\ 3)(7\ 1)(11\ 1)$$

$$B(3\ 6) = 770 = (2\ 1)(5\ 1)(7\ 1)(11\ 1)$$

$$B(4\ 5) = 880 = (2\ 4)(5\ 1)(11\ 1)$$

$$B(5\ 4) = 935 = (5\ 1)(11\ 1)(17\ 1)$$

$$B(6\ 3) = 924 = (2\ 2)(3\ 1)(7\ 1)(11\ 1)$$

$$B(7\ 2) = 836 = (2\ 2)(11\ 1)(19\ 1)$$

$$B(8\ 1) = 660 = (2\ 2)(3\ 1)(5\ 1)(11\ 1)$$

$$B(9\ 0) = 385 = (5\ 1)(7\ 1)(11\ 1)$$

$$G(0\ 1) = 14 = (2\ 1)(7\ 1) \quad \begin{matrix} 1 \\ \circ \Rightarrow \circ \\ 2 \end{matrix}$$

$$G(1\ 0) = 7 = (7\ 1)$$

$$G(0\ 2) = 77 = (7\ 1)(11\ 1)$$

$$G(1\ 1) = 64 = (2\ 6)$$

$$G(2\ 0) = 27 = (3\ 3)$$

$$G(0\ 3) = 273 = (3\ 1)(7\ 1)(13\ 1)$$

$$G(1\ 2) = 286 = (2\ 1)(11\ 1)(13\ 1)$$

$$G(2\ 1) = 189 = (3\ 3)(7\ 1)$$

$$G(3\ 0) = 77 = (7\ 1)(11\ 1)$$

$$G(0\ 4) = 748 = (2\ 2)(11\ 1)(17\ 1)$$

$$G(1\ 3) = 896 = (2\ 7)(7\ 1)$$

$$G(2\ 2) = 729 = (3\ 6)$$

$$G(3\ 1) = 448 = (2\ 6)(7\ 1)$$

$$G(4\ 0) = 182 = (2\ 1)(7\ 1)(13\ 1)$$

$$G(0\ 5) = 1729 = (7\ 1)(13\ 1)(19\ 1)$$

$$G(1\ 4) = 2261 = (7\ 1)(17\ 1)(19\ 1)$$

$$G(2\ 3) = 2079 = (3\ 3)(7\ 1)(11\ 1)$$

$$G(3\ 2) = 1547 = (7\ 1)(13\ 1)(17\ 1)$$

$$G(4\ 1) = 924 = (2\ 2)(3\ 1)(7\ 1)(11\ 1)$$

$$G(5\ 0) = 378 = (2\ 1)(3\ 3)(7\ 1)$$

$$G(0\ 6) = 3542 = (2\ 1)(7\ 1)(11\ 1)(23\ 1)$$

$$G(1\ 5) = 4928 = (2\ 6)(7\ 1)(11\ 1)$$

$$G(2\ 4) = 4914 = (2\ 1)(3\ 3)(7\ 1)(13\ 1)$$

$$G(3\ 3) = 4096 = (2\ 12)$$

$$G(4\ 2) = 2926 = (2\ 1)(7\ 1)(11\ 1)(19\ 1)$$

$$G(5\ 1) = 1728 = (2\ 6)(3\ 3)$$

$$G(6\ 0) = 714 = (2\ 1)(3\ 1)(7\ 1)(17\ 1)$$

$$G(0\ 7) = 6630 = (2\ 1)(3\ 1)(5\ 1)(13\ 1)(17\ 1)$$

$$G(1\ 6) = 9660 = (2\ 2)(3\ 1)(5\ 1)(7\ 1)(23\ 1)$$

$$G(2\ 5) = 10206 = (2\ 1)(3\ 6)(7\ 1)$$

$$G(3\ 4) = 9177 = (3\ 1)(7\ 1)(19\ 1)(23\ 1)$$

$$G(4\ 3) = 7293 = (3\ 1)(11\ 1)(13\ 1)(17\ 1)$$

$$G(5\ 2) = 5103 = (3\ 6)(7\ 1)$$

$$G(6\ 1) = 3003 = (3\ 1)(7\ 1)(11\ 1)(13\ 1)$$

$$G(7\ 0) = 1254 = (2\ 1)(3\ 1)(11\ 1)(19\ 1)$$

$$G(0\ 8) = 11571 = (3\ 1)(7\ 1)(19\ 1)(29\ 1)$$

$$G(1\ 7) = 17472 = (2\ 6)(3\ 1)(7\ 1)(13\ 1)$$

$$G(2\ 6) = 19278 = (2\ 1)(3\ 4)(7\ 1)(17\ 1)$$

$$G(3\ 5) = 18304 = (2\ 7)(11\ 1)(13\ 1)$$

$$G(4\ 4) = 15625 = (5\ 6)$$

$$G(5\ 3) = 12096 = (2\ 6)(3\ 3)(7\ 1)$$

$$G(6\ 2) = 8372 = (2\ 2)(7\ 1)(13\ 1)(23\ 1)$$

$$G(7\ 1) = 4928 = (2\ 6)(7\ 1)(11\ 1)$$

$$G(8\ 0) = 2079 = (3\ 3)(7\ 1)(11\ 1)$$

$$G(0\ 9) = 19096 = (2\ 3)(7\ 1)(11\ 1)(31\ 1)$$

$$G(1\ 8) = 29667 = (3\ 1)(11\ 1)(29\ 1)(31\ 1)$$

$$G(2\ 7) = 33858 = (2\ 1)(3\ 4)(11\ 1)(19\ 1)$$

$$G(3\ 6) = 33495 = (3\ 1)(5\ 1)(7\ 1)(11\ 1)(29\ 1)$$

$$G(4\ 5) = 30107 = (7\ 1)(11\ 1)(17\ 1)(23\ 1)$$

$$G(5\ 4) = 24948 = (2\ 2)(3\ 4)(7\ 1)(11\ 1)$$

$$G(6\ 3) = 19019 = (7\ 1)(11\ 1)(13\ 1)(19\ 1)$$

$$G(7\ 2) = 13090 = (2\ 1)(5\ 1)(7\ 1)(11\ 1)(17\ 1)$$

$$G(8\ 1) = 7722 = (2\ 1)(3\ 3)(11\ 1)(13\ 1)$$

$$G(9\ 0) = 3289 = (11\ 1)(13\ 1)(23\ 1)$$

$$A(0\ 0\ 1) = 4 = (2\ 2) \quad \begin{matrix} 1 & 2 & 3 \\ \circ & \circ & \circ \end{matrix}$$

$$A(0\ 1\ 0) = 6 = (2\ 1)(3\ 1)$$

$$A(1\ 0\ 0) = 4 = (2\ 2)$$

$$A(0\ 0\ 2) = 10 = (2\ 1)(5\ 1)$$

$$A(0\ 1\ 1) = 20 = (2\ 2)(5\ 1)$$

$$A(1\ 0\ 1) = 15 = (3\ 1)(5\ 1)$$

$$A(0\ 2\ 0) = 20 = (2\ 2)(5\ 1)$$

$$A(1\ 1\ 0) = 20 = (2\ 2)(5\ 1)$$

$$A(2\ 0\ 0) = 10 = (2\ 1)(5\ 1)$$

$$A(0\ 0\ 3) = 20 = (2\ 2)(5\ 1)$$

$$A(0\ 1\ 2) = 45 = (3\ 2)(5\ 1)$$

$$A(1\ 0\ 2) = 36 = (2\ 2)(3\ 2)$$

$$A(0\ 2\ 1) = 60 = (2\ 2)(3\ 1)(5\ 1)$$

$$A(1\ 1\ 1) = 64 = (2\ 6)$$

$$A(2\ 0\ 1) = 36 = (2\ 2)(3\ 2)$$

$$A(0\ 3\ 0) = 50 = (2\ 1)(5\ 2)$$

$$A(1\ 2\ 0) = 60 = (2\ 2)(3\ 1)(5\ 1)$$

$$A(2\ 1\ 0) = 45 = (3\ 2)(5\ 1)$$

$$A(3\ 0\ 0) = 20 = (2\ 2)(5\ 1)$$

$$A(0\ 0\ 4) = 35 = (5\ 1)(7\ 1)$$

$$A(0\ 1\ 3) = 84 = (2\ 2)(3\ 1)(7\ 1)$$

$$A(1\ 0\ 3) = 70 = (2\ 1)(5\ 1)(7\ 1)$$

$$A(0\ 2\ 2) = 126 = (2\ 1)(3\ 2)(7\ 1)$$

$$A(1\ 1\ 2) = 140 = (2\ 2)(5\ 1)(7\ 1)$$

$$A(2\ 0\ 2) = 84 = (2\ 2)(3\ 1)(7\ 1)$$

$$A(0\ 3\ 1) = 140 = (2\ 2)(5\ 1)(7\ 1)$$

$$A(1\ 2\ 1) = 175 = (5\ 2)(7\ 1)$$

$$A(2\ 1\ 1) = 140 = (2\ 2)(5\ 1)(7\ 1)$$

$$A(3\ 0\ 1) = 70 = (2\ 1)(5\ 1)(7\ 1)$$

$$A(0\ 4\ 0) = 105 = (3\ 1)(5\ 1)(7\ 1)$$

$$A(1\ 3\ 0) = 140 = (2\ 2)(5\ 1)(7\ 1)$$

$$A(2\ 2\ 0) = 126 = (2\ 1)(3\ 2)(7\ 1)$$

$$A(3\ 1\ 0) = 84 = (2\ 2)(3\ 1)(7\ 1)$$

$$A(4\ 0\ 0) = 35 = (5\ 1)(7\ 1)$$

$$A(0\ 0\ 5) = 56 = (2\ 3)(7\ 1)$$

$$A(0\ 1\ 4) = 140 = (2\ 2)(5\ 1)(7\ 1)$$

$$A(1\ 0\ 4) = 120 = (2\ 3)(3\ 1)(5\ 1)$$

$$A(0\ 2\ 3) = 224 = (2\ 5)(7\ 1)$$

$$A(1\ 1\ 3) = 256 = (2\ 8)$$

$$A(2\ 0\ 3) = 160 = (2\ 5)(5\ 1)$$

$$A(0\ 3\ 2) = 280 = (2\ 3)(5\ 1)(7\ 1)$$

$$A(1\ 2\ 2) = 360 = (2\ 3)(3\ 2)(5\ 1)$$

$$A(2\ 1\ 2) = 300 = (2\ 2)(3\ 1)(5\ 2)$$

$$A(3\ 0\ 2) = 160 = (2\ 5)(5\ 1)$$

$$A(0\ 4\ 1) = 280 = (2\ 3)(5\ 1)(7\ 1)$$

$$A(1\ 3\ 1) = 384 = (2\ 7)(3\ 1)$$

$$A(2\ 2\ 1) = 360 = (2\ 3)(3\ 2)(5\ 1)$$

$$A(3\ 1\ 1) = 256 = (2\ 8)$$

$$A(4\ 0\ 1) = 120 = (2\ 3)(3\ 1)(5\ 1)$$

$$A(0\ 5\ 0) = 196 = (2\ 2)(7\ 2)$$

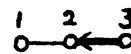
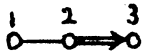
$$A(1\ 4\ 0) = 280 = (2\ 3)(5\ 1)(7\ 1)$$

$$A(2\ 3\ 0) = 280 = (2\ 3)(5\ 1)(7\ 1)$$

$$A(3\ 2\ 0) = 224 = (2\ 5)(7\ 1)$$

$$A(4\ 1\ 0) = 140 = (2\ 2)(5\ 1)(7\ 1)$$

$$A(5\ 0\ 0) = 56 = (2\ 3)(7\ 1)$$



$B(0\ 0\ 1) = 8 = (2\ 3)$
 $B(0\ 1\ 0) = 21 = (3\ 1)(7\ 1)$
 $B(1\ 0\ 0) = 7 = (7\ 1)$

$B(0\ 0\ 2) = 35 = (5\ 1)(7\ 1)$
 $B(0\ 1\ 1) = 112 = (2\ 4)(7\ 1)$
 $B(1\ 0\ 1) = 48 = (2\ 4)(3\ 1)$
 $B(0\ 2\ 0) = 168 = (2\ 3)(3\ 1)(7\ 1)$
 $B(1\ 1\ 0) = 105 = (3\ 1)(5\ 1)(7\ 1)$
 $B(2\ 0\ 0) = 27 = (3\ 3)$

$B(0\ 0\ 3) = 112 = (2\ 4)(7\ 1)$
 $B(0\ 1\ 2) = 378 = (2\ 1)(3\ 3)(7\ 1)$
 $B(1\ 0\ 2) = 189 = (3\ 3)(7\ 1)$
 $B(0\ 2\ 1) = 720 = (2\ 4)(3\ 2)(5\ 1)$
 $B(1\ 1\ 1) = 512 = (2\ 9)$
 $B(2\ 0\ 1) = 168 = (2\ 3)(3\ 1)(7\ 1)$
 $B(0\ 3\ 0) = 825 = (3\ 1)(5\ 2)(11\ 1)$
 $B(1\ 2\ 0) = 693 = (3\ 2)(7\ 1)(11\ 1)$
 $B(2\ 1\ 0) = 330 = (2\ 1)(3\ 1)(5\ 1)(11\ 1)$
 $B(3\ 0\ 0) = 77 = (7\ 1)(11\ 1)$

$B(0\ 0\ 4) = 294 = (2\ 1)(3\ 1)(7\ 2)$
 $B(0\ 1\ 3) = 1008 = (2\ 4)(3\ 2)(7\ 1)$
 $B(1\ 0\ 3) = 560 = (2\ 4)(5\ 1)(7\ 1)$
 $B(0\ 2\ 2) = 2079 = (3\ 3)(7\ 1)(11\ 1)$
 $B(1\ 1\ 2) = 1617 = (3\ 1)(7\ 2)(11\ 1)$
 $B(2\ 0\ 2) = 616 = (2\ 3)(7\ 1)(11\ 1)$
 $B(0\ 3\ 1) = 3080 = (2\ 3)(5\ 1)(7\ 1)(11\ 1)$
 $B(1\ 2\ 1) = 2800 = (2\ 4)(5\ 2)(7\ 1)$
 $B(2\ 1\ 1) = 1512 = (2\ 3)(3\ 3)(7\ 1)$
 $B(3\ 0\ 1) = 448 = (2\ 6)(7\ 1)$
 $B(0\ 4\ 0) = 3003 = (3\ 1)(7\ 1)(11\ 1)(13\ 1)$
 $B(1\ 3\ 0) = 3003 = (3\ 1)(7\ 1)(11\ 1)(13\ 1)$
 $B(2\ 2\ 0) = 1911 = (3\ 1)(7\ 2)(13\ 1)$
 $B(3\ 1\ 0) = 819 = (3\ 2)(7\ 1)(13\ 1)$
 $B(4\ 0\ 0) = 182 = (2\ 1)(7\ 1)(13\ 1)$

$B(0\ 0\ 5) = 672 = (2\ 5)(3\ 1)(7\ 1)$
 $B(0\ 1\ 4) = 2310 = (2\ 1)(3\ 1)(5\ 1)(7\ 1)(11\ 1)$
 $B(1\ 0\ 4) = 1386 = (2\ 1)(3\ 2)(7\ 1)(11\ 1)$
 $B(0\ 2\ 3) = 4928 = (2\ 6)(7\ 1)(11\ 1)$
 $B(1\ 1\ 3) = 4096 = (2\ 12)$
 $B(2\ 0\ 3) = 1728 = (2\ 6)(3\ 3)$
 $B(0\ 3\ 2) = 8008 = (2\ 3)(7\ 1)(11\ 1)(13\ 1)$
 $B(1\ 2\ 2) = 7722 = (2\ 1)(3\ 3)(11\ 1)(13\ 1)$
 $B(2\ 1\ 2) = 4550 = (2\ 1)(5\ 2)(7\ 1)(13\ 1)$
 $B(3\ 0\ 2) = 1560 = (2\ 3)(3\ 1)(5\ 1)(13\ 1)$
 $B(0\ 4\ 1) = 10192 = (2\ 4)(7\ 2)(13\ 1)$
 $B(1\ 3\ 1) = 10752 = (2\ 9)(3\ 1)(7\ 1)$
 $B(2\ 2\ 1) = 7392 = (2\ 5)(3\ 1)(7\ 1)(11\ 1)$
 $B(3\ 1\ 1) = 3584 = (2\ 9)(7\ 1)$
 $B(4\ 0\ 1) = 1008 = (2\ 4)(3\ 2)(7\ 1)$
 $B(0\ 5\ 0) = 8918 = (2\ 1)(7\ 3)(13\ 1)$
 $B(1\ 4\ 0) = 10010 = (2\ 1)(5\ 1)(7\ 1)(11\ 1)(13\ 1)$
 $B(2\ 3\ 0) = 7560 = (2\ 3)(3\ 3)(5\ 1)(7\ 1)$
 $B(3\ 2\ 0) = 4312 = (2\ 3)(7\ 2)(11\ 1)$
 $B(4\ 1\ 0) = 1750 = (2\ 1)(5\ 3)(7\ 1)$
 $B(5\ 0\ 0) = 378 = (2\ 1)(3\ 3)(7\ 1)$

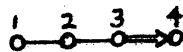
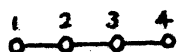
$C(0\ 0\ 1) = 14 = (2\ 1)(7\ 1)$
 $C(0\ 1\ 0) = 14 = (2\ 1)(7\ 1)$
 $C(1\ 0\ 0) = 6 = (2\ 1)(3\ 1)$

$C(0\ 0\ 2) = 84 = (2\ 2)(3\ 1)(7\ 1)$
 $C(0\ 1\ 1) = 126 = (2\ 1)(3\ 2)(7\ 1)$
 $C(1\ 0\ 1) = 70 = (2\ 1)(5\ 1)(7\ 1)$
 $C(0\ 2\ 0) = 90 = (2\ 1)(3\ 2)(5\ 1)$
 $C(1\ 1\ 0) = 64 = (2\ 6)$
 $C(2\ 0\ 0) = 21 = (3\ 1)(7\ 1)$

$C(0\ 0\ 3) = 330 = (2\ 1)(3\ 1)(5\ 1)(11\ 1)$
 $C(0\ 1\ 2) = 594 = (2\ 1)(3\ 3)(11\ 1)$
 $C(1\ 0\ 2) = 378 = (2\ 1)(3\ 3)(7\ 1)$
 $C(0\ 2\ 1) = 616 = (2\ 3)(7\ 1)(11\ 1)$
 $C(1\ 1\ 1) = 512 = (2\ 9)$
 $C(2\ 0\ 1) = 216 = (2\ 3)(3\ 3)$
 $C(0\ 3\ 0) = 385 = (5\ 1)(7\ 1)(11\ 1)$
 $C(1\ 2\ 0) = 350 = (2\ 1)(5\ 2)(7\ 1)$
 $C(2\ 1\ 0) = 189 = (3\ 3)(7\ 1)$
 $C(3\ 0\ 0) = 56 = (2\ 3)(7\ 1)$

$C(0\ 0\ 4) = 1001 = (7\ 1)(11\ 1)(13\ 1)$
 $C(0\ 1\ 3) = 2002 = (2\ 1)(7\ 1)(11\ 1)(13\ 1)$
 $C(1\ 0\ 3) = 1386 = (2\ 1)(3\ 2)(7\ 1)(11\ 1)$
 $C(0\ 2\ 2) = 2457 = (3\ 3)(7\ 1)(13\ 1)$
 $C(1\ 1\ 2) = 2240 = (2\ 6)(5\ 1)(7\ 1)$
 $C(2\ 0\ 2) = 1078 = (2\ 1)(7\ 2)(11\ 1)$
 $C(0\ 3\ 1) = 2184 = (2\ 3)(3\ 1)(7\ 1)(13\ 1)$
 $C(1\ 2\ 1) = 2205 = (3\ 2)(5\ 1)(7\ 2)$
 $C(2\ 1\ 1) = 1386 = (2\ 1)(3\ 2)(7\ 1)(11\ 1)$
 $C(3\ 0\ 1) = 525 = (3\ 1)(5\ 2)(7\ 1)$
 $C(0\ 4\ 0) = 1274 = (2\ 1)(7\ 2)(13\ 1)$
 $C(1\ 3\ 0) = 1344 = (2\ 6)(3\ 1)(7\ 1)$
 $C(2\ 2\ 0) = 924 = (2\ 2)(3\ 1)(7\ 1)(11\ 1)$
 $C(3\ 1\ 0) = 448 = (2\ 6)(7\ 1)$
 $C(4\ 0\ 0) = 126 = (2\ 1)(3\ 2)(7\ 1)$

$C(0\ 0\ 5) = 2548 = (2\ 2)(7\ 2)(13\ 1)$
 $C(0\ 1\ 4) = 5460 = (2\ 2)(3\ 1)(5\ 1)(7\ 1)(13\ 1)$
 $C(1\ 0\ 4) = 4004 = (2\ 2)(7\ 1)(11\ 1)(13\ 1)$
 $C(0\ 2\ 3) = 7392 = (2\ 5)(3\ 1)(7\ 1)(11\ 1)$
 $C(1\ 1\ 3) = 7168 = (2\ 10)(7\ 1)$
 $C(2\ 0\ 3) = 3744 = (2\ 5)(3\ 2)(13\ 1)$
 $C(0\ 3\ 2) = 7700 = (2\ 2)(5\ 2)(7\ 1)(11\ 1)$
 $C(1\ 2\ 2) = 8316 = (2\ 2)(3\ 3)(7\ 1)(11\ 1)$
 $C(2\ 1\ 2) = 5720 = (2\ 3)(5\ 1)(11\ 1)(13\ 1)$
 $C(3\ 0\ 2) = 2464 = (2\ 5)(7\ 1)(11\ 1)$
 $C(0\ 4\ 1) = 6300 = (2\ 2)(3\ 2)(5\ 2)(7\ 1)$
 $C(1\ 3\ 1) = 7168 = (2\ 10)(7\ 1)$
 $C(2\ 2\ 1) = 5460 = (2\ 2)(3\ 1)(5\ 1)(7\ 1)(13\ 1)$
 $C(3\ 1\ 1) = 3072 = (2\ 10)(3\ 1)$
 $C(4\ 0\ 1) = 1100 = (2\ 2)(5\ 2)(11\ 1)$
 $C(0\ 5\ 0) = 3528 = (2\ 3)(3\ 2)(7\ 2)$
 $C(1\ 4\ 0) = 4116 = (2\ 2)(3\ 1)(7\ 3)$
 $C(2\ 3\ 0) = 3276 = (2\ 2)(3\ 2)(7\ 1)(13\ 1)$
 $C(3\ 2\ 0) = 2016 = (2\ 5)(3\ 22)(7\ 1)$
 $C(4\ 1\ 0) = 924 = (2\ 2)(3\ 1)(7\ 1)(11\ 1)$
 $C(5\ 0\ 0) = 252 = (2\ 2)(3\ 2)(7\ 1)$



$$\begin{aligned} A(0\ 0\ 0\ 1) &= 5 = (5\ 1) \\ A(0\ 0\ 1\ 0) &= 10 = (2\ 1)(5\ 1) \\ A(0\ 1\ 0\ 0) &= 10 = (2\ 1)(5\ 1) \\ A(1\ 0\ 0\ 0) &= 5 = (5\ 1) \end{aligned}$$

$$\begin{aligned} A(0\ 0\ 0\ 2) &= 15 = (3\ 1)(5\ 1) \\ A(0\ 0\ 1\ 1) &= 40 = (2\ 3)(5\ 1) \\ A(0\ 1\ 0\ 1) &= 45 = (3\ 2)(5\ 1) \\ A(1\ 0\ 0\ 1) &= 24 = (2\ 3)(3\ 1) \\ A(0\ 0\ 2\ 0) &= 50 = (2\ 1)(5\ 2) \\ A(0\ 1\ 1\ 0) &= 75 = (3\ 1)(5\ 2) \\ A(1\ 0\ 1\ 0) &= 45 = (3\ 2)(5\ 1) \\ A(0\ 2\ 0\ 0) &= 50 = (2\ 1)(5\ 2) \\ A(1\ 1\ 0\ 0) &= 40 = (2\ 3)(5\ 1) \\ A(2\ 0\ 0\ 0) &= 15 = (3\ 1)(5\ 1) \end{aligned}$$

$$\begin{aligned} A(0\ 0\ 0\ 3) &= 35 = (5\ 1)(7\ 1) \\ A(0\ 0\ 1\ 2) &= 105 = (3\ 1)(5\ 1)(7\ 1) \\ A(0\ 1\ 0\ 2) &= 126 = (2\ 1)(3\ 2)(7\ 1) \\ A(1\ 0\ 0\ 2) &= 70 = (2\ 1)(5\ 1)(7\ 1) \\ A(0\ 0\ 2\ 1) &= 175 = (5\ 2)(7\ 1) \\ A(0\ 1\ 1\ 1) &= 280 = (2\ 3)(5\ 1)(7\ 1) \\ A(1\ 0\ 1\ 1) &= 175 = (5\ 2)(7\ 1) \\ A(0\ 2\ 0\ 1) &= 210 = (2\ 1)(3\ 1)(5\ 1)(7\ 1) \\ A(1\ 1\ 0\ 1) &= 175 = (5\ 2)(7\ 1) \\ A(2\ 0\ 0\ 1) &= 70 = (2\ 1)(5\ 1)(7\ 1) \\ A(0\ 0\ 3\ 0) &= 175 = (5\ 2)(7\ 1) \\ A(0\ 1\ 2\ 0) &= 315 = (3\ 2)(5\ 1)(7\ 1) \\ A(1\ 0\ 2\ 0) &= 210 = (2\ 1)(3\ 1)(5\ 1)(7\ 1) \\ A(0\ 2\ 1\ 0) &= 315 = (3\ 2)(5\ 1)(7\ 1) \\ A(1\ 1\ 1\ 0) &= 280 = (2\ 3)(5\ 1)(7\ 1) \\ A(2\ 0\ 1\ 0) &= 126 = (2\ 1)(3\ 2)(7\ 1) \\ A(0\ 3\ 0\ 0) &= 175 = (5\ 2)(7\ 1) \\ A(1\ 2\ 0\ 0) &= 175 = (5\ 2)(7\ 1) \\ A(2\ 1\ 0\ 0) &= 105 = (3\ 1)(5\ 1)(7\ 1) \\ A(3\ 0\ 0\ 0) &= 35 = (5\ 1)(7\ 1) \end{aligned}$$

$$\begin{aligned} B(0\ 0\ 0\ 1) &= 16 = (2\ 4) \\ B(0\ 0\ 1\ 0) &= 84 = (2\ 2)(3\ 1)(7\ 1) \\ B(0\ 1\ 0\ 0) &= 36 = (2\ 2)(3\ 2) \\ B(1\ 0\ 0\ 0) &= 9 = (3\ 2) \end{aligned}$$

$$\begin{aligned} B(0\ 0\ 0\ 2) &= 126 = (2\ 1)(3\ 2)(7\ 1) \\ B(0\ 0\ 1\ 1) &= 768 = (2\ 8)(3\ 1) \\ B(0\ 1\ 0\ 1) &= 432 = (2\ 4)(3\ 3) \\ B(1\ 0\ 0\ 1) &= 128 = (2\ 7) \\ B(0\ 0\ 2\ 0) &= 1980 = (2\ 2)(3\ 2)(5\ 1)(11\ 1) \\ B(0\ 1\ 1\ 0) &= 1650 = (2\ 1)(3\ 1)(5\ 2)(11\ 1) \\ B(1\ 0\ 1\ 0) &= 594 = (2\ 1)(3\ 3)(11\ 1) \\ B(0\ 2\ 0\ 0) &= 495 = (3\ 2)(5\ 1)(11\ 1) \\ B(1\ 1\ 0\ 0) &= 231 = (3\ 1)(7\ 1)(11\ 1) \\ B(2\ 0\ 0\ 0) &= 44 = (2\ 2)(11\ 1) \end{aligned}$$

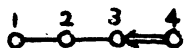
$$\begin{aligned} B(0\ 0\ 0\ 3) &= 672 = (2\ 5)(3\ 1)(7\ 1) \\ B(0\ 0\ 1\ 2) &= 4158 = (2\ 1)(3\ 3)(7\ 1)(11\ 1) \\ B(0\ 1\ 0\ 2) &= 2772 = (2\ 2)(3\ 2)(7\ 1)(11\ 1) \\ B(1\ 0\ 0\ 2) &= 924 = (2\ 2)(3\ 1)(7\ 1)(11\ 1) \\ B(0\ 0\ 2\ 1) &= 13200 = (2\ 4)(3\ 1)(5\ 2)(11\ 1) \\ B(0\ 1\ 1\ 1) &= 12672 = (2\ 7)(3\ 2)(11\ 1) \\ B(1\ 0\ 1\ 1) &= 5040 = (2\ 4)(3\ 2)(5\ 1)(7\ 1) \\ B(0\ 2\ 0\ 1) &= 4928 = (2\ 6)(7\ 1)(11\ 1) \\ B(1\ 1\ 0\ 1) &= 2560 = (2\ 9)(5\ 1) \\ B(2\ 0\ 0\ 1) &= 576 = (2\ 6)(3\ 2) \\ B(0\ 0\ 3\ 0) &= 23595 = (3\ 1)(5\ 1)(11\ 2)(13\ 1) \\ B(0\ 1\ 2\ 0) &= 27027 = (3\ 3)(7\ 1)(11\ 1)(13\ 1) \\ B(1\ 0\ 2\ 0) &= 12012 = (2\ 2)(3\ 1)(7\ 1)(11\ 1)(13\ 1) \\ B(0\ 2\ 1\ 0) &= 15444 = (2\ 2)(3\ 3)(11\ 1)(13\ 1) \\ B(1\ 1\ 1\ 0) &= 9009 = (3\ 2)(7\ 1)(11\ 1)(13\ 1) \\ B(2\ 0\ 1\ 0) &= 2457 = (3\ 3)(7\ 1)(13\ 1) \\ B(0\ 3\ 0\ 0) &= 4004 = (2\ 2)(7\ 1)(11\ 1)(13\ 1) \\ B(1\ 2\ 0\ 0) &= 2574 = (2\ 1)(3\ 2)(11\ 1)(13\ 1) \\ B(2\ 1\ 0\ 0) &= 910 = (2\ 1)(5\ 1)(7\ 1)(13\ 1) \\ B(3\ 0\ 0\ 0) &= 156 = (2\ 2)(3\ 1)(13\ 1) \end{aligned}$$

基本表現 (一般の rank)

$$A_l(\overline{\omega}_i) = \frac{(l+1)!}{i! (l+1-i)!}$$

$$B_l(\overline{\omega}_i) = \frac{(2l+1)!}{i! (2l+1-i)!} \quad \text{if } i < l$$

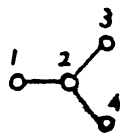
$$= 2^l \quad \text{if } i = l$$



$$\begin{aligned} C(0\ 0\ 0\ 1) &= 42 = (2\ 1)(3\ 1)(7\ 1) \\ C(0\ 0\ 1\ 0) &= 48 = (2\ 4)(3\ 1) \\ C(0\ 1\ 0\ 0) &= 27 = (3\ 3) \\ C(1\ 0\ 0\ 0) &= 8 = (2\ 3) \end{aligned}$$

$$\begin{aligned} C(0\ 0\ 0\ 2) &= 594 = (2\ 1)(3\ 3)(11\ 1) \\ C(0\ 0\ 1\ 1) &= 1056 = (2\ 5)(3\ 1)(11\ 1) \\ C(0\ 1\ 0\ 1) &= 792 = (2\ 3)(3\ 2)(11\ 1) \\ C(1\ 0\ 0\ 1) &= 288 = (2\ 5)(3\ 2) \\ C(0\ 0\ 2\ 0) &= 825 = (3\ 1)(5\ 2)(11\ 1) \\ C(0\ 1\ 1\ 0) &= 792 = (2\ 3)(3\ 2)(11\ 1) \\ C(1\ 0\ 1\ 0) &= 315 = (3\ 2)(5\ 1)(7\ 1) \\ C(0\ 2\ 0\ 0) &= 308 = (2\ 2)(7\ 1)(11\ 1) \\ C(1\ 1\ 0\ 0) &= 160 = (2\ 5)(5\ 1) \\ C(2\ 0\ 0\ 0) &= 36 = (2\ 2)(3\ 2) \end{aligned}$$

$$\begin{aligned} C(0\ 0\ 0\ 3) &= 4719 = (3\ 1)(11\ 2)(13\ 1) \\ C(0\ 0\ 1\ 2) &= 10296 = (2\ 3)(3\ 2)(11\ 1)(13\ 1) \\ C(0\ 1\ 0\ 2) &= 9009 = (3\ 2)(7\ 1)(11\ 1)(13\ 1) \\ C(1\ 0\ 0\ 2) &= 3696 = (2\ 4)(3\ 1)(7\ 1)(11\ 1) \\ C(0\ 0\ 2\ 1) &= 12012 = (2\ 2)(3\ 1)(7\ 1)(11\ 1)(13\ 1) \\ C(0\ 1\ 1\ 1) &= 13728 = (2\ 5)(3\ 1)(11\ 1)(13\ 1) \\ C(1\ 0\ 1\ 1) &= 6237 = (3\ 4)(7\ 1)(11\ 1) \\ C(0\ 2\ 0\ 1) &= 7020 = (2\ 2)(3\ 3)(5\ 1)(13\ 1) \\ C(1\ 1\ 0\ 1) &= 4200 = (2\ 3)(3\ 1)(5\ 2)(7\ 1) \\ C(2\ 0\ 0\ 1) &= 1155 = (3\ 1)(5\ 1)(7\ 1)(11\ 1) \\ C(0\ 0\ 3\ 0) &= 8008 = (2\ 3)(7\ 1)(11\ 1)(13\ 1) \\ C(0\ 1\ 2\ 0) &= 10010 = (2\ 1)(5\ 1)(7\ 1)(11\ 1)(13\ 1) \\ C(1\ 0\ 2\ 0) &= 4752 = (2\ 4)(3\ 3)(11\ 1) \\ C(0\ 2\ 1\ 0) &= 6552 = (2\ 3)(3\ 2)(7\ 1)(13\ 1) \\ C(1\ 1\ 1\ 0) &= 4096 = (2\ 12) \\ C(2\ 0\ 1\ 0) &= 1232 = (2\ 4)(7\ 1)(11\ 1) \\ C(0\ 3\ 0\ 0) &= 2184 = (2\ 3)(3\ 1)(7\ 1)(13\ 1) \\ C(1\ 2\ 0\ 0) &= 1512 = (2\ 3)(3\ 3)(7\ 1) \\ C(2\ 1\ 0\ 0) &= 594 = (2\ 1)(3\ 3)(11\ 1) \\ C(3\ 0\ 0\ 0) &= 120 = (2\ 3)(3\ 1)(5\ 1) \end{aligned}$$



$$\begin{aligned} D(0\ 0\ 0\ 1) &= 8 = (2\ 3) \\ D(0\ 0\ 1\ 0) &= 8 = (2\ 3) \\ D(0\ 1\ 0\ 0) &= 28 = (2\ 2)(7\ 1) \\ D(1\ 0\ 0\ 0) &= 8 = (2\ 3) \end{aligned}$$

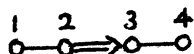
$$\begin{aligned} D(0\ 0\ 0\ 2) &= 35 = (5\ 1)(7\ 1) \\ D(0\ 0\ 1\ 1) &= 56 = (2\ 3)(7\ 1) \\ D(0\ 1\ 0\ 1) &= 160 = (2\ 5)(5\ 1) \\ D(1\ 0\ 0\ 1) &= 56 = (2\ 3)(7\ 1) \\ D(0\ 0\ 2\ 0) &= 35 = (5\ 1)(7\ 1) \\ D(0\ 1\ 1\ 0) &= 160 = (2\ 5)(5\ 1) \\ D(1\ 0\ 1\ 0) &= 56 = (2\ 3)(7\ 1) \\ D(0\ 2\ 0\ 0) &= 300 = (2\ 2)(3\ 1)(5\ 2) \\ D(1\ 1\ 0\ 0) &= 160 = (2\ 5)(5\ 1) \\ D(2\ 0\ 0\ 0) &= 35 = (5\ 1)(7\ 1) \end{aligned}$$

$$\begin{aligned} D(0\ 0\ 0\ 3) &= 112 = (2\ 4)(7\ 1) \\ D(0\ 0\ 1\ 2) &= 224 = (2\ 5)(7\ 1) \\ D(0\ 1\ 0\ 2) &= 567 = (3\ 4)(7\ 1) \\ D(1\ 0\ 0\ 2) &= 224 = (2\ 5)(7\ 1) \\ D(0\ 0\ 2\ 1) &= 224 = (2\ 5)(7\ 1) \\ D(0\ 1\ 1\ 1) &= 840 = (2\ 3)(3\ 1)(5\ 1)(7\ 1) \\ D(1\ 0\ 1\ 1) &= 350 = (2\ 1)(5\ 2)(7\ 1) \\ D(0\ 2\ 0\ 1) &= 1400 = (2\ 3)(5\ 2)(7\ 1) \\ D(1\ 1\ 0\ 1) &= 840 = (2\ 3)(3\ 1)(5\ 1)(7\ 1) \\ D(2\ 0\ 0\ 1) &= 224 = (2\ 5)(7\ 1) \\ D(0\ 0\ 3\ 0) &= 112 = (2\ 4)(7\ 1) \\ D(0\ 1\ 2\ 0) &= 567 = (3\ 4)(7\ 1) \\ D(1\ 0\ 2\ 0) &= 224 = (2\ 5)(7\ 1) \\ D(0\ 2\ 1\ 0) &= 1400 = (2\ 3)(5\ 2)(7\ 1) \\ D(1\ 1\ 1\ 0) &= 840 = (2\ 3)(3\ 1)(5\ 1)(7\ 1) \\ D(2\ 0\ 1\ 0) &= 224 = (2\ 5)(7\ 1) \\ D(0\ 3\ 0\ 0) &= 1925 = (5\ 2)(7\ 1)(11\ 1) \\ D(1\ 2\ 0\ 0) &= 1400 = (2\ 3)(5\ 2)(7\ 1) \\ D(2\ 1\ 0\ 0) &= 567 = (3\ 4)(7\ 1) \\ D(3\ 0\ 0\ 0) &= 112 = (2\ 4)(7\ 1) \end{aligned}$$

基本表現 (- 級の rank) .

$$C_l(\omega_i) = \frac{2(l+1-i) \cdot (2l+1)!}{i! \cdot (2l+2-i)!}$$

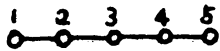
$$\begin{aligned} D_l(\omega_i) &= \frac{(2l)!}{i! (2l-i)!} \quad \text{if } i < l-1 \\ &= 2^{l-1} \quad \text{if } i = l-1 \text{ or } l \end{aligned}$$



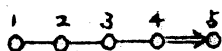
$F(0\ 0\ 0\ 1) = 26 = (2\ 1)(13\ 1)$
 $F(0\ 0\ 1\ 0) = 273 = (3\ 1)(7\ 1)(13\ 1)$
 $F(0\ 1\ 0\ 0) = 1274 = (2\ 1)(7\ 2)(13\ 1)$
 $F(1\ 0\ 0\ 0) = 52 = (2\ 2)(13\ 1)$

$F(0\ 0\ 0\ 2) = 324 = (2\ 2)(3\ 4)$
 $F(0\ 0\ 1\ 1) = 4096 = (2\ 12)$
 $F(0\ 1\ 0\ 1) = 19278 = (2\ 1)(3\ 4)(7\ 1)(17\ 1)$
 $F(1\ 0\ 0\ 1) = 1053 = (3\ 4)(13\ 1)$
 $F(0\ 0\ 2\ 0) = 19448 = (2\ 3)(11\ 1)(13\ 1)(17\ 1)$
 $F(0\ 1\ 1\ 0) = 107406 = (2\ 1)(3\ 5)(13\ 1)(17\ 1)$
 $F(1\ 0\ 1\ 0) = 8424 = (2\ 3)(3\ 4)(13\ 1)$
 $F(0\ 2\ 0\ 0) = 226746 = (2\ 1)(3\ 3)(13\ 1)(17\ 1)(19\ 1)$
 $F(1\ 1\ 0\ 0) = 29172 = (2\ 2)(3\ 1)(11\ 1)(13\ 1)(17\ 1)$
 $F(2\ 0\ 0\ 0) = 1053 = (3\ 4)(13\ 1)$

$F(0\ 0\ 0\ 3) = 2652 = (2\ 2)(3\ 1)(13\ 1)(17\ 1)$
 $F(0\ 0\ 1\ 2) = 34749 = (3\ 5)(11\ 1)(13\ 1)$
 $F(0\ 1\ 0\ 2) = 160056 = (2\ 3)(3\ 4)(13\ 1)(19\ 1)$
 $F(1\ 0\ 0\ 2) = 10829 = (7\ 2)(13\ 1)(17\ 1)$
 $F(0\ 0\ 2\ 1) = 205751 = (7\ 2)(13\ 1)(17\ 1)(19\ 1)$
 $F(0\ 1\ 1\ 1) = 1118208 = (2\ 12)(3\ 1)(7\ 1)(13\ 1)$
 $F(1\ 0\ 1\ 1) = 106496 = (2\ 13)(13\ 1)$
 $F(0\ 2\ 0\ 1) = 2488563 = (3\ 5)(7\ 2)(11\ 1)(19\ 1)$
 $F(1\ 1\ 0\ 1) = 379848 = (2\ 3)(3\ 1)(7\ 2)(17\ 1)(19\ 1)$
 $F(2\ 0\ 0\ 1) = 17901 = (3\ 4)(13\ 1)(17\ 1)$
 $F(0\ 0\ 3\ 0) = 629356 = (2\ 2)(7\ 2)(13\ 2)(19\ 1)$
 $F(0\ 1\ 2\ 0) = 3508596 = (2\ 2)(3\ 4)(7\ 2)(13\ 1)(17\ 1)$
 $F(1\ 0\ 2\ 0) = 420147 = (3\ 5)(7\ 1)(13\ 1)(19\ 1)$
 $F(0\ 2\ 1\ 0) = 9683388 = (2\ 2)(3\ 4)(11\ 2)(13\ 1)(19\ 1)$
 $F(1\ 1\ 1\ 0) = 1801371 = (3\ 1)(11\ 1)(13\ 2)(17\ 1)(19\ 1)$
 $F(2\ 0\ 1\ 0) = 119119 = (7\ 2)(11\ 1)(13\ 1)(17\ 1)$
 $F(0\ 3\ 0\ 0) = 13530946 = (2\ 1)(11\ 3)(13\ 1)(17\ 1)(23\ 1)$
 $F(1\ 2\ 0\ 0) = 3195192 = (2\ 3)(3\ 1)(7\ 2)(11\ 1)(13\ 1)(19\ 1)$
 $F(2\ 1\ 0\ 0) = 340119 = (3\ 4)(13\ 1)(17\ 1)(19\ 1)$
 $F(3\ 0\ 0\ 0) = 12376 = (2\ 3)(7\ 1)(13\ 1)(17\ 1)$



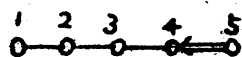
$$\begin{aligned}
 A(0\ 0\ 0\ 0\ 1) &= 6 = (2\ 1)(3\ 1) \\
 A(0\ 0\ 0\ 1\ 0) &= 15 = (3\ 1)(5\ 1) \\
 A(0\ 0\ 1\ 0\ 0) &= 20 = (2\ 2)(5\ 1) \\
 A(0\ 1\ 0\ 0\ 0) &= 15 = (3\ 1)(5\ 1) \\
 A(1\ 0\ 0\ 0\ 0) &= 6 = (2\ 1)(3\ 1) \\
 \\
 A(0\ 0\ 0\ 0\ 2) &= 21 = (3\ 1)(7\ 1) \\
 A(0\ 0\ 0\ 1\ 1) &= 70 = (2\ 1)(5\ 1)(7\ 1) \\
 A(0\ 0\ 1\ 0\ 1) &= 105 = (3\ 1)(5\ 1)(7\ 1) \\
 A(0\ 1\ 0\ 0\ 1) &= 84 = (2\ 2)(3\ 1)(7\ 1) \\
 A(1\ 0\ 0\ 0\ 1) &= 35 = (5\ 1)(7\ 1) \\
 A(0\ 0\ 0\ 2\ 0) &= 105 = (3\ 1)(5\ 1)(7\ 1) \\
 A(0\ 0\ 1\ 1\ 0) &= 210 = (2\ 1)(3\ 1)(5\ 1)(7\ 1) \\
 A(0\ 1\ 0\ 1\ 0) &= 189 = (3\ 3)(7\ 1) \\
 A(1\ 0\ 0\ 1\ 0) &= 84 = (2\ 2)(3\ 1)(7\ 1) \\
 A(0\ 0\ 2\ 0\ 0) &= 175 = (5\ 2)(7\ 1) \\
 A(0\ 1\ 1\ 0\ 0) &= 210 = (2\ 1)(3\ 1)(5\ 1)(7\ 1) \\
 A(1\ 0\ 1\ 0\ 0) &= 105 = (3\ 1)(5\ 1)(7\ 1) \\
 A(0\ 2\ 0\ 0\ 0) &= 105 = (3\ 1)(5\ 1)(7\ 1) \\
 A(1\ 1\ 0\ 0\ 0) &= 70 = (2\ 1)(5\ 1)(7\ 1) \\
 A(2\ 0\ 0\ 0\ 0) &= 21 = (3\ 1)(7\ 1) \\
 \\
 A(0\ 0\ 0\ 0\ 3) &= 56 = (2\ 3)(7\ 1) \\
 A(0\ 0\ 0\ 1\ 2) &= 210 = (2\ 1)(3\ 1)(5\ 1)(7\ 1) \\
 A(0\ 0\ 1\ 0\ 2) &= 336 = (2\ 4)(3\ 1)(7\ 1) \\
 A(0\ 1\ 0\ 0\ 2) &= 280 = (2\ 3)(5\ 1)(7\ 1) \\
 A(1\ 0\ 0\ 0\ 2) &= 120 = (2\ 3)(3\ 1)(5\ 1) \\
 A(0\ 0\ 0\ 2\ 1) &= 420 = (2\ 2)(3\ 1)(5\ 1)(7\ 1) \\
 A(0\ 0\ 1\ 1\ 1) &= 896 = (2\ 7)(7\ 1) \\
 A(0\ 1\ 0\ 1\ 1) &= 840 = (2\ 3)(3\ 1)(5\ 1)(7\ 1) \\
 A(1\ 0\ 0\ 1\ 1) &= 384 = (2\ 7)(3\ 1) \\
 A(0\ 0\ 2\ 0\ 1) &= 840 = (2\ 3)(3\ 1)(5\ 1)(7\ 1) \\
 A(0\ 1\ 1\ 0\ 1) &= 1050 = (2\ 1)(3\ 1)(5\ 2)(7\ 1) \\
 A(1\ 0\ 1\ 0\ 1) &= 540 = (2\ 2)(3\ 3)(5\ 1) \\
 A(0\ 2\ 0\ 0\ 1) &= 560 = (2\ 4)(5\ 1)(7\ 1) \\
 A(1\ 1\ 0\ 0\ 1) &= 384 = (2\ 7)(3\ 1) \\
 A(2\ 0\ 0\ 0\ 1) &= 120 = (2\ 3)(3\ 1)(5\ 1) \\
 A(0\ 0\ 0\ 3\ 0) &= 490 = (2\ 1)(5\ 1)(7\ 2) \\
 A(0\ 0\ 1\ 2\ 0) &= 1176 = (2\ 3)(3\ 1)(7\ 2) \\
 A(0\ 1\ 0\ 2\ 0) &= 1176 = (2\ 3)(3\ 1)(7\ 2) \\
 A(1\ 0\ 0\ 2\ 0) &= 560 = (2\ 4)(5\ 1)(7\ 1) \\
 A(0\ 0\ 2\ 1\ 0) &= 1470 = (2\ 1)(3\ 1)(5\ 1)(7\ 2) \\
 A(0\ 1\ 1\ 1\ 0) &= 1960 = (2\ 3)(5\ 1)(7\ 2) \\
 A(1\ 0\ 1\ 1\ 0) &= 1050 = (2\ 1)(3\ 1)(5\ 2)(7\ 1) \\
 A(0\ 2\ 0\ 1\ 0) &= 1176 = (2\ 3)(3\ 1)(7\ 2) \\
 A(1\ 1\ 0\ 1\ 0) &= 840 = (2\ 3)(3\ 1)(5\ 1)(7\ 1) \\
 A(2\ 0\ 0\ 1\ 0) &= 280 = (2\ 3)(5\ 1)(7\ 1) \\
 A(0\ 0\ 3\ 0\ 0) &= 980 = (2\ 2)(5\ 1)(7\ 2) \\
 A(0\ 1\ 2\ 0\ 0) &= 1470 = (2\ 1)(3\ 1)(5\ 1)(7\ 2) \\
 A(1\ 0\ 2\ 0\ 0) &= 840 = (2\ 3)(3\ 1)(5\ 1)(7\ 1) \\
 A(0\ 2\ 1\ 0\ 0) &= 1176 = (2\ 3)(3\ 1)(7\ 2) \\
 A(1\ 1\ 1\ 0\ 0) &= 896 = (2\ 7)(7\ 1) \\
 A(2\ 0\ 1\ 0\ 0) &= 336 = (2\ 4)(3\ 1)(7\ 1) \\
 A(0\ 3\ 0\ 0\ 0) &= 490 = (2\ 1)(5\ 1)(7\ 2) \\
 A(1\ 2\ 0\ 0\ 0) &= 420 = (2\ 2)(3\ 1)(5\ 1)(7\ 1) \\
 A(2\ 1\ 0\ 0\ 0) &= 210 = (2\ 1)(3\ 1)(5\ 1)(7\ 1) \\
 A(3\ 0\ 0\ 0\ 0) &= 56 = (2\ 3)(7\ 1)
 \end{aligned}$$



$B(0\ 0\ 0\ 0\ 1) = 32 = (2\ 5)$
 $B(0\ 0\ 0\ 1\ 0) = 330 = (2\ 1)(3\ 1)(5\ 1)(11\ 1)$
 $B(0\ 0\ 1\ 0\ 0) = 165 = (3\ 1)(5\ 1)(11\ 1)$
 $B(0\ 1\ 0\ 0\ 0) = 55 = (5\ 1)(11\ 1)$
 $B(1\ 0\ 0\ 0\ 0) = 11 = (11\ 1)$

$B(0\ 0\ 0\ 0\ 2) = 462 = (2\ 1)(3\ 1)(7\ 1)(11\ 1)$
 $B(0\ 0\ 0\ 1\ 1) = 5280 = (2\ 5)(3\ 1)(5\ 1)(11\ 1)$
 $B(0\ 0\ 1\ 0\ 1) = 3520 = (2\ 6)(5\ 1)(11\ 1)$
 $B(0\ 1\ 0\ 0\ 1) = 1408 = (2\ 7)(11\ 1)$
 $B(1\ 0\ 0\ 0\ 1) = 320 = (2\ 6)(5\ 1)$
 $B(0\ 0\ 0\ 2\ 0) = 23595 = (3\ 1)(5\ 1)(11\ 2)(13\ 1)$
 $B(0\ 0\ 1\ 1\ 0) = 23595 = (3\ 1)(5\ 1)(11\ 2)(13\ 1)$
 $B(0\ 1\ 0\ 1\ 0) = 11583 = (3\ 4)(11\ 1)(13\ 1)$
 $B(1\ 0\ 0\ 1\ 0) = 3003 = (3\ 1)(7\ 1)(11\ 1)(13\ 1)$
 $B(0\ 0\ 2\ 0\ 0) = 7865 = (5\ 1)(11\ 2)(13\ 1)$
 $B(0\ 1\ 1\ 0\ 0) = 5005 = (5\ 1)(7\ 1)(11\ 1)(13\ 1)$
 $B(1\ 0\ 1\ 0\ 0) = 1430 = (2\ 1)(5\ 1)(11\ 1)(13\ 1)$
 $B(0\ 2\ 0\ 0\ 0) = 1144 = (2\ 3)(11\ 1)(13\ 1)$
 $B(1\ 1\ 0\ 0\ 0) = 429 = (3\ 1)(11\ 1)(13\ 1)$
 $B(2\ 0\ 0\ 0\ 0) = 65 = (5\ 1)(13\ 1)$

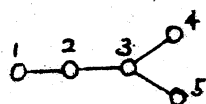
$B(0\ 0\ 0\ 0\ 3) = 4224 = (2\ 7)(3\ 1)(11\ 1)$
 $B(0\ 0\ 0\ 1\ 2) = 47190 = (2\ 1)(3\ 1)(5\ 1)(11\ 2)(13\ 1)$
 $B(0\ 0\ 1\ 0\ 2) = 37752 = (2\ 3)(3\ 1)(11\ 2)(13\ 1)$
 $B(0\ 1\ 0\ 0\ 2) = 17160 = (2\ 3)(3\ 1)(5\ 1)(11\ 1)(13\ 1)$
 $B(1\ 0\ 0\ 0\ 2) = 4290 = (2\ 1)(3\ 1)(5\ 1)(11\ 1)(13\ 1)$
 $B(0\ 0\ 0\ 2\ 1) = 251680 = (2\ 5)(5\ 1)(11\ 2)(13\ 1)$
 $B(0\ 0\ 1\ 1\ 1) = 292864 = (2\ 11)(11\ 1)(13\ 1)$
 $B(0\ 1\ 0\ 1\ 1) = 160160 = (2\ 5)(5\ 1)(7\ 1)(11\ 1)(13\ 1)$
 $B(1\ 0\ 0\ 1\ 1) = 45056 = (2\ 12)(11\ 1)$
 $B(0\ 0\ 2\ 0\ 1) = 128128 = (2\ 7)(7\ 1)(11\ 1)(13\ 1)$
 $B(0\ 1\ 1\ 0\ 1) = 91520 = (2\ 7)(5\ 1)(11\ 1)(13\ 1)$
 $B(1\ 0\ 1\ 0\ 1) = 28512 = (2\ 5)(3\ 4)(11\ 1)$
 $B(0\ 2\ 0\ 0\ 1) = 24960 = (2\ 7)(3\ 1)(5\ 1)(13\ 1)$
 $B(1\ 1\ 0\ 0\ 1) = 10240 = (2\ 11)(5\ 1)$
 $B(2\ 0\ 0\ 0\ 1) = 1760 = (2\ 5)(5\ 1)(11\ 1)$
 $B(0\ 0\ 0\ 3\ 0) = 715715 = (5\ 1)(7\ 1)(11\ 2)(13\ 2)$
 $B(0\ 0\ 1\ 2\ 0) = 1002001 = (7\ 2)(11\ 2)(13\ 2)$
 $B(0\ 1\ 0\ 2\ 0) = 616616 = (2\ 3)(7\ 2)(11\ 2)(13\ 1)$
 $B(1\ 0\ 0\ 2\ 0) = 198760 = (2\ 3)(3\ 1)(5\ 1)(11\ 2)(13\ 1)$
 $B(0\ 0\ 2\ 1\ 0) = 650650 = (2\ 1)(5\ 2)(7\ 1)(11\ 1)(13\ 2)$
 $B(0\ 1\ 1\ 1\ 0) = 525525 = (3\ 1)(5\ 2)(7\ 2)(11\ 1)(13\ 1)$
 $B(1\ 0\ 1\ 1\ 0) = 178750 = (2\ 1)(5\ 4)(11\ 1)(13\ 1)$
 $B(0\ 2\ 0\ 1\ 0) = 175175 = (5\ 2)(7\ 2)(11\ 1)(13\ 1)$
 $B(1\ 1\ 0\ 1\ 0) = 78650 = (2\ 1)(5\ 2)(11\ 2)(13\ 1)$
 $B(2\ 0\ 0\ 1\ 0) = 15400 = (2\ 3)(5\ 2)(7\ 1)(11\ 1)$
 $B(0\ 0\ 3\ 0\ 0) = 182182 = (2\ 1)(7\ 2)(11\ 1)(13\ 2)$
 $B(0\ 1\ 2\ 0\ 0) = 162162 = (2\ 1)(3\ 4)(7\ 1)(11\ 1)(13\ 1)$
 $B(1\ 0\ 2\ 0\ 0) = 57915 = (3\ 4)(5\ 1)(11\ 1)(13\ 1)$
 $B(0\ 2\ 1\ 0\ 0) = 70070 = (2\ 1)(5\ 1)(7\ 2)(11\ 1)(13\ 1)$
 $B(1\ 1\ 1\ 0\ 0) = 33033 = (3\ 1)(7\ 1)(11\ 2)(13\ 1)$
 $B(2\ 0\ 1\ 0\ 0) = 7128 = (2\ 3)(3\ 4)(11\ 1)$
 $B(0\ 3\ 0\ 0\ 0) = 13650 = (2\ 1)(3\ 1)(5\ 2)(7\ 1)(13\ 1)$
 $B(1\ 2\ 0\ 0\ 0) = 7150 = (2\ 1)(5\ 2)(11\ 1)(13\ 1)$
 $B(2\ 1\ 0\ 0\ 0) = 2025 = (3\ 4)(5\ 2)$
 $B(3\ 0\ 0\ 0\ 0) = 275 = (5\ 2)(11\ 1)$



$C(0\ 0\ 0\ 0\ 1) = 132 = (2\ 2)(3\ 1)(11\ 1)$
 $C(0\ 0\ 0\ 1\ 0) = 165 = (3\ 1)(5\ 1)(11\ 1)$
 $C(0\ 0\ 1\ 0\ 0) = 110 = (2\ 1)(5\ 1)(11\ 1)$
 $C(0\ 1\ 0\ 0\ 0) = 44 = (2\ 2)(11\ 1)$
 $C(1\ 0\ 0\ 0\ 0) = 10 = (2\ 1)(5\ 1)$

$C(0\ 0\ 0\ 0\ 2) = 4719 = (3\ 1)(11\ 2)(13\ 1)$
 $C(0\ 0\ 0\ 1\ 1) = 9438 = (2\ 1)(3\ 1)(11\ 2)(13\ 1)$
 $C(0\ 0\ 1\ 0\ 1) = 8580 = (2\ 2)(3\ 1)(5\ 1)(11\ 1)(13\ 1)$
 $C(0\ 1\ 0\ 0\ 1) = 4290 = (2\ 1)(3\ 1)(5\ 1)(11\ 1)(13\ 1)$
 $C(1\ 0\ 0\ 0\ 1) = 1155 = (3\ 1)(5\ 1)(7\ 1)(11\ 1)$
 $C(0\ 0\ 0\ 2\ 0) = 7865 = (5\ 1)(11\ 2)(13\ 1)$
 $C(0\ 0\ 1\ 1\ 0) = 9152 = (2\ 6)(11\ 1)(13\ 1)$
 $C(0\ 1\ 0\ 1\ 0) = 5005 = (5\ 1)(7\ 1)(11\ 1)(13\ 1)$
 $C(1\ 0\ 0\ 1\ 0) = 1408 = (2\ 7)(11\ 1)$
 $C(0\ 0\ 2\ 0\ 0) = 4004 = (2\ 2)(7\ 1)(11\ 1)(13\ 1)$
 $C(0\ 1\ 1\ 0\ 0) = 2860 = (2\ 2)(5\ 1)(11\ 1)(13\ 1)$
 $C(1\ 0\ 1\ 0\ 0) = 891 = (3\ 4)(11\ 1)$
 $C(0\ 2\ 0\ 0\ 0) = 780 = (2\ 2)(3\ 1)(5\ 1)(13\ 1)$
 $C(1\ 1\ 0\ 0\ 0) = 320 = (2\ 6)(5\ 1)$
 $C(2\ 0\ 0\ 0\ 0) = 55 = (5\ 1)(11\ 1)$

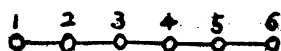
$C(0\ 0\ 0\ 0\ 3) = 81796 = (2\ 2)(11\ 2)(13\ 2)$
 $C(0\ 0\ 0\ 1\ 2) = 204490 = (2\ 1)(5\ 1)(11\ 2)(13\ 2)$
 $C(0\ 0\ 1\ 0\ 2) = 220220 = (2\ 2)(5\ 1)(7\ 1)(11\ 2)(13\ 1)$
 $C(0\ 1\ 0\ 0\ 2) = 125840 = (2\ 4)(5\ 1)(11\ 2)(13\ 1)$
 $C(1\ 0\ 0\ 0\ 2) = 37752 = (2\ 3)(3\ 1)(11\ 2)(13\ 1)$
 $C(0\ 0\ 0\ 2\ 1) = 260260 = (2\ 2)(5\ 1)(7\ 1)(11\ 1)(13\ 2)$
 $C(0\ 0\ 1\ 1\ 1) = 366080 = (2\ 9)(5\ 1)(11\ 1)(13\ 1)$
 $C(0\ 1\ 0\ 1\ 1) = 231660 = (2\ 2)(3\ 4)(5\ 1)(11\ 1)(13\ 1)$
 $C(1\ 0\ 0\ 1\ 1) = 73216 = (2\ 9)(11\ 1)(13\ 1)$
 $C(0\ 0\ 2\ 0\ 1) = 214500 = (2\ 2)(3\ 1)(5\ 3)(11\ 1)(13\ 1)$
 $C(0\ 1\ 1\ 0\ 1) = 178750 = (2\ 1)(5\ 4)(11\ 1)(13\ 1)$
 $C(1\ 0\ 1\ 0\ 1) = 62920 = (2\ 3)(5\ 1)(11\ 2)(13\ 1)$
 $C(0\ 2\ 0\ 0\ 1) = 60500 = (2\ 2)(5\ 3)(11\ 2)$
 $C(1\ 1\ 0\ 0\ 1) = 28160 = (2\ 9)(5\ 1)(11\ 1)$
 $C(2\ 0\ 0\ 0\ 1) = 5720 = (2\ 3)(5\ 1)(11\ 1)(13\ 1)$
 $C(0\ 0\ 0\ 3\ 0) = 182182 = (2\ 1)(7\ 2)(11\ 1)(13\ 2)$
 $C(0\ 0\ 1\ 2\ 0) = 280280 = (2\ 3)(5\ 1)(7\ 2)(11\ 1)(13\ 1)$
 $C(0\ 1\ 0\ 2\ 0) = 185328 = (2\ 4)(3\ 4)(11\ 1)(13\ 1)$
 $C(1\ 0\ 0\ 2\ 0) = 60060 = (2\ 2)(3\ 1)(5\ 1)(7\ 1)(11\ 1)(13\ 1)$
 $C(0\ 0\ 2\ 1\ 0) = 210210 = (2\ 1)(3\ 1)(5\ 1)(7\ 2)(11\ 1)(13\ 1)$
 $C(0\ 1\ 1\ 1\ 0) = 183040 = (2\ 8)(5\ 1)(11\ 1)(13\ 1)$
 $C(1\ 0\ 1\ 1\ 0) = 66066 = (2\ 1)(3\ 1)(7\ 1)(11\ 2)(13\ 1)$
 $C(0\ 2\ 0\ 1\ 0) = 67760 = (2\ 4)(5\ 1)(7\ 1)(11\ 2)$
 $C(1\ 1\ 0\ 1\ 0) = 32340 = (2\ 2)(3\ 1)(5\ 1)(7\ 2)(11\ 1)$
 $C(2\ 0\ 0\ 1\ 0) = 6864 = (2\ 4)(3\ 1)(11\ 1)(13\ 1)$
 $C(0\ 0\ 3\ 0\ 0) = 76440 = (2\ 3)(3\ 1)(5\ 1)(7\ 2)(13\ 1)$
 $C(0\ 1\ 2\ 0\ 0) = 73710 = (2\ 1)(3\ 4)(5\ 1)(7\ 1)(13\ 1)$
 $C(1\ 0\ 2\ 0\ 0) = 28028 = (2\ 2)(7\ 2)(11\ 1)(13\ 1)$
 $C(0\ 2\ 1\ 0\ 0) = 35640 = (2\ 3)(3\ 4)(5\ 1)(11\ 1)$
 $C(1\ 1\ 1\ 0\ 0) = 17920 = (2\ 9)(5\ 1)(7\ 1)$
 $C(2\ 0\ 1\ 0\ 0) = 4212 = (2\ 2)(3\ 4)(13\ 1)$
 $C(0\ 3\ 0\ 0\ 0) = 8250 = (2\ 1)(3\ 1)(5\ 3)(11\ 1)$
 $C(1\ 2\ 0\ 0\ 0) = 4620 = (2\ 2)(3\ 1)(5\ 1)(7\ 1)(11\ 1)$
 $C(2\ 1\ 0\ 0\ 0) = 1430 = (2\ 1)(5\ 1)(11\ 1)(13\ 1)$
 $C(3\ 0\ 0\ 0\ 0) = 220 = (2\ 2)(5\ 1)(11\ 1)$



$D(0\ 0\ 0\ 0\ 1) = 16 = (2\ 4)$
 $D(0\ 0\ 0\ 1\ 0) = 16 = (2\ 4)$
 $D(0\ 0\ 1\ 0\ 0) = 120 = (2\ 3)(3\ 1)(5\ 1)$
 $D(0\ 1\ 0\ 0\ 0) = 45 = (3\ 2)(5\ 1)$
 $D(1\ 0\ 0\ 0\ 0) = 10 = (2\ 1)(5\ 1)$

$D(0\ 0\ 0\ 0\ 2) = 126 = (2\ 1)(3\ 2)(7\ 1)$
 $D(0\ 0\ 0\ 1\ 1) = 210 = (2\ 1)(3\ 1)(5\ 1)(7\ 1)$
 $D(0\ 0\ 1\ 0\ 1) = 1200 = (2\ 4)(3\ 1)(5\ 2)$
 $D(0\ 1\ 0\ 0\ 1) = 560 = (2\ 4)(5\ 1)(7\ 1)$
 $D(1\ 0\ 0\ 0\ 1) = 144 = (2\ 4)(3\ 2)$
 $D(0\ 0\ 0\ 2\ 0) = 126 = (2\ 1)(3\ 2)(7\ 1)$
 $D(0\ 0\ 1\ 1\ 0) = 1200 = (2\ 4)(3\ 1)(5\ 2)$
 $D(0\ 1\ 0\ 1\ 0) = 560 = (2\ 4)(5\ 1)(7\ 1)$
 $D(1\ 0\ 0\ 1\ 0) = 144 = (2\ 4)(3\ 2)$
 $D(0\ 0\ 2\ 0\ 0) = 4125 = (3\ 1)(5\ 3)(11\ 1)$
 $D(0\ 1\ 1\ 0\ 0) = 2970 = (2\ 1)(3\ 3)(5\ 1)(11\ 1)$
 $D(1\ 0\ 1\ 0\ 0) = 945 = (3\ 3)(5\ 1)(7\ 1)$
 $D(0\ 2\ 0\ 0\ 0) = 770 = (2\ 1)(5\ 1)(7\ 1)(11\ 1)$
 $D(1\ 1\ 0\ 0\ 0) = 320 = (2\ 6)(5\ 1)$
 $D(2\ 0\ 0\ 0\ 0) = 54 = (2\ 1)(3\ 3)$

$D(0\ 0\ 0\ 0\ 3) = 672 = (2\ 5)(3\ 1)(7\ 1)$
 $D(0\ 0\ 0\ 1\ 2) = 1440 = (2\ 5)(3\ 2)(5\ 1)$
 $D(0\ 0\ 1\ 0\ 2) = 6930 = (2\ 1)(3\ 2)(5\ 1)(7\ 1)(11\ 1)$
 $D(0\ 1\ 0\ 0\ 2) = 3696 = (2\ 4)(3\ 1)(7\ 1)(11\ 1)$
 $D(1\ 0\ 0\ 0\ 2) = 1050 = (2\ 1)(3\ 1)(5\ 2)(7\ 1)$
 $D(0\ 0\ 0\ 2\ 1) = 1440 = (2\ 5)(3\ 2)(5\ 1)$
 $D(0\ 0\ 1\ 1\ 1) = 10560 = (2\ 6)(3\ 1)(5\ 1)(11\ 1)$
 $D(0\ 1\ 0\ 1\ 1) = 5940 = (2\ 2)(3\ 3)(5\ 1)(11\ 1)$
 $D(1\ 0\ 0\ 1\ 1) = 1728 = (2\ 6)(3\ 3)$
 $D(0\ 0\ 2\ 0\ 1) = 30800 = (2\ 4)(5\ 2)(7\ 1)(11\ 1)$
 $D(0\ 1\ 1\ 0\ 1) = 25200 = (2\ 4)(3\ 2)(5\ 2)(7\ 1)$
 $D(1\ 0\ 1\ 0\ 1) = 8800 = (2\ 5)(5\ 2)(11\ 1)$
 $D(0\ 2\ 0\ 0\ 1) = 8064 = (2\ 7)(3\ 2)(7\ 1)$
 $D(1\ 1\ 0\ 0\ 1) = 3696 = (2\ 4)(3\ 1)(7\ 1)(11\ 1)$
 $D(2\ 0\ 0\ 0\ 1) = 720 = (2\ 4)(3\ 2)(5\ 1)$
 $D(0\ 0\ 0\ 3\ 0) = 672 = (2\ 5)(3\ 1)(7\ 1)$
 $D(0\ 0\ 1\ 2\ 0) = 6930 = (2\ 1)(3\ 2)(5\ 1)(7\ 1)(11\ 1)$
 $D(0\ 1\ 0\ 2\ 0) = 3696 = (2\ 4)(3\ 1)(7\ 1)(11\ 1)$
 $D(1\ 0\ 0\ 2\ 0) = 1050 = (2\ 1)(3\ 1)(5\ 2)(7\ 1)$
 $D(0\ 0\ 2\ 1\ 0) = 30800 = (2\ 4)(5\ 2)(7\ 1)(11\ 1)$
 $D(0\ 1\ 1\ 1\ 0) = 25200 = (2\ 4)(3\ 2)(5\ 2)(7\ 1)$
 $D(1\ 0\ 1\ 1\ 0) = 8800 = (2\ 5)(5\ 2)(11\ 1)$
 $D(0\ 2\ 0\ 1\ 0) = 8064 = (2\ 7)(3\ 2)(7\ 1)$
 $D(1\ 1\ 0\ 1\ 0) = 3696 = (2\ 4)(3\ 1)(7\ 1)(11\ 1)$
 $D(2\ 0\ 0\ 1\ 0) = 720 = (2\ 4)(3\ 2)(5\ 1)$
 $D(0\ 0\ 3\ 0\ 0) = 70070 = (2\ 1)(5\ 1)(7\ 2)(11\ 1)(13\ 1)$
 $D(0\ 1\ 2\ 0\ 0) = 70070 = (2\ 1)(5\ 1)(7\ 2)(11\ 1)(13\ 1)$
 $D(1\ 0\ 2\ 0\ 0) = 27720 = (2\ 3)(3\ 2)(5\ 1)(7\ 1)(11\ 1)$
 $D(0\ 2\ 1\ 0\ 0) = 34398 = (2\ 1)(3\ 3)(7\ 2)(13\ 1)$
 $D(1\ 1\ 1\ 0\ 0) = 17920 = (2\ 9)(5\ 1)(7\ 1)$
 $D(2\ 0\ 1\ 0\ 0) = 4312 = (2\ 3)(7\ 2)(11\ 1)$
 $D(0\ 3\ 0\ 0\ 0) = 7644 = (2\ 2)(3\ 1)(7\ 2)(13\ 1)$
 $D(1\ 2\ 0\ 0\ 0) = 4410 = (2\ 1)(3\ 2)(5\ 1)(7\ 2)$
 $D(2\ 1\ 0\ 0\ 0) = 1386 = (2\ 1)(3\ 2)(7\ 1)(11\ 1)$
 $D(3\ 0\ 0\ 0\ 0) = 210 = (2\ 1)(3\ 1)(5\ 1)(7\ 1)$



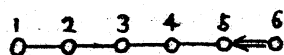
$A(0\ 0\ 0\ 0\ 0\ 1) = 7 = (7\ 1)$
 $A(0\ 0\ 0\ 0\ 1\ 0) = 21 = (3\ 1)(7\ 1)$
 $A(0\ 0\ 0\ 1\ 0\ 0) = 35 = (5\ 1)(7\ 1)$
 $A(0\ 0\ 1\ 0\ 0\ 0) = 35 = (5\ 1)(7\ 1)$
 $A(0\ 1\ 0\ 0\ 0\ 0) = 21 = (3\ 1)(7\ 1)$
 $A(1\ 0\ 0\ 0\ 0\ 0) = 7 = (7\ 1)$

 $A(0\ 0\ 0\ 0\ 0\ 2) = 28 = (2\ 2)(7\ 1)$
 $A(0\ 0\ 0\ 0\ 1\ 1) = 112 = (2\ 4)(7\ 1)$
 $A(0\ 0\ 0\ 1\ 0\ 1) = 210 = (2\ 1)(3\ 1)(5\ 1)(7\ 1)$
 $A(0\ 0\ 1\ 0\ 0\ 1) = 224 = (2\ 5)(7\ 1)$
 $A(0\ 1\ 0\ 0\ 0\ 1) = 140 = (2\ 2)(5\ 1)(7\ 1)$
 $A(1\ 0\ 0\ 0\ 0\ 1) = 48 = (2\ 4)(3\ 1)$
 $A(0\ 0\ 0\ 0\ 2\ 0) = 196 = (2\ 2)(7\ 2)$
 $A(0\ 0\ 0\ 1\ 1\ 0) = 490 = (2\ 1)(5\ 1)(7\ 2)$
 $A(0\ 0\ 1\ 0\ 1\ 0) = 588 = (2\ 2)(3\ 1)(7\ 2)$
 $A(0\ 1\ 0\ 0\ 1\ 0) = 392 = (2\ 3)(7\ 2)$
 $A(1\ 0\ 0\ 0\ 1\ 0) = 140 = (2\ 2)(5\ 1)(7\ 1)$
 $A(0\ 0\ 0\ 2\ 0\ 0) = 490 = (2\ 1)(5\ 1)(7\ 2)$
 $A(0\ 0\ 1\ 1\ 0\ 0) = 784 = (2\ 4)(7\ 2)$
 $A(0\ 1\ 0\ 1\ 0\ 0) = 588 = (2\ 2)(3\ 1)(7\ 2)$
 $A(1\ 0\ 0\ 1\ 0\ 0) = 224 = (2\ 5)(7\ 1)$
 $A(0\ 0\ 2\ 0\ 0\ 0) = 490 = (2\ 1)(5\ 1)(7\ 2)$
 $A(0\ 1\ 1\ 0\ 0\ 0) = 490 = (2\ 1)(5\ 1)(7\ 2)$
 $A(1\ 0\ 1\ 0\ 0\ 0) = 210 = (2\ 1)(3\ 1)(5\ 1)(7\ 1)$
 $A(0\ 2\ 0\ 0\ 0\ 0) = 196 = (2\ 2)(7\ 2)$
 $A(1\ 1\ 0\ 0\ 0\ 0) = 112 = (2\ 4)(7\ 1)$
 $A(2\ 0\ 0\ 0\ 0\ 0) = 28 = (2\ 2)(7\ 1)$



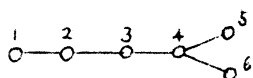
$B(0\ 0\ 0\ 0\ 0\ 1) = 64 = (2\ 6)$
 $B(0\ 0\ 0\ 0\ 1\ 0) = 1287 = (3\ 2)(11\ 1)(13\ 1)$
 $B(0\ 0\ 0\ 1\ 0\ 0) = 715 = (5\ 1)(11\ 1)(13\ 1)$
 $B(0\ 0\ 1\ 0\ 0\ 0) = 286 = (2\ 1)(11\ 1)(13\ 1)$
 $B(0\ 1\ 0\ 0\ 0\ 0) = 78 = (2\ 1)(3\ 1)(13\ 1)$
 $B(1\ 0\ 0\ 0\ 0\ 0) = 13 = (13\ 1)$

 $B(0\ 0\ 0\ 0\ 0\ 2) = 1716 = (2\ 2)(3\ 1)(11\ 1)(13\ 1)$
 $B(0\ 0\ 0\ 0\ 1\ 1) = 36608 = (2\ 8)(11\ 1)(13\ 1)$
 $B(0\ 0\ 0\ 1\ 0\ 1) = 27456 = (22\ 6)(3\ 1)(11\ 1)(13\ 1)$
 $B(0\ 0\ 1\ 0\ 0\ 1) = 13312 = (2\ 10)(13\ 1)$
 $B(0\ 1\ 0\ 0\ 0\ 1) = 4160 = (2\ 6)(5\ 1)(13\ 1)$
 $B(1\ 0\ 0\ 0\ 0\ 1) = 768 = (2\ 8)(3\ 1)$
 $B(0\ 0\ 0\ 0\ 2\ 0) = 286286 = (2\ 1)(7\ 1)(11\ 2)(13\ 2)$
 $B(0\ 0\ 0\ 1\ 1\ 0) = 325325 = (5\ 2)(7\ 1)(11\ 1)(13\ 2)$
 $B(0\ 0\ 1\ 0\ 1\ 0) = 195195 = (3\ 1)(5\ 1)(7\ 1)(11\ 1)(13\ 2)$
 $B(0\ 1\ 0\ 0\ 1\ 0) = 70070 = (2\ 1)(5\ 1)(7\ 2)(11\ 1)(13\ 1)$
 $B(1\ 0\ 0\ 0\ 1\ 0) = 14300 = (2\ 2)(5\ 2)(11\ 1)(13\ 1)$
 $B(0\ 0\ 0\ 2\ 0\ 0) = 117117 = (3\ 2)(7\ 1)(11\ 1)(13\ 2)$
 $B(0\ 0\ 1\ 1\ 0\ 0) = 91091 = (7\ 2)(11\ 1)(13\ 2)$
 $B(0\ 1\ 0\ 1\ 0\ 0) = 36036 = (2\ 2)(3\ 2)(7\ 1)(11\ 1)(13\ 1)$
 $B(1\ 0\ 0\ 1\ 0\ 0) = 7722 = (2\ 1)(3\ 3)(11\ 1)(13\ 1)$
 $B(0\ 0\ 2\ 0\ 0\ 0) = 23660 = (2\ 2)(5\ 1)(7\ 1)(13\ 2)$
 $B(0\ 1\ 1\ 0\ 0\ 0) = 12285 = (3\ 3)(5\ 1)(7\ 1)(13\ 1)$
 $B(1\ 0\ 1\ 0\ 0\ 0) = 2925 = (3\ 2)(5\ 2)(13\ 1)$
 $B(0\ 2\ 0\ 0\ 0\ 0) = 2275 = (5\ 2)(7\ 1)(13\ 1)$
 $B(1\ 1\ 0\ 0\ 0\ 0) = 715 = (5\ 1)(11\ 1)(13\ 1)$
 $B(2\ 0\ 0\ 0\ 0\ 0) = 90 = (2\ 1)(3\ 2)(5\ 1)$



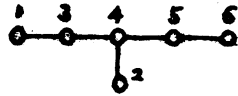
$C(0\ 0\ 0\ 0\ 0\ 1) = 429 = (3\ 1)(11\ 1)(13\ 1)$
 $C(0\ 0\ 0\ 0\ 1\ 0) = 572 = (2\ 2)(11\ 1)(13\ 1)$
 $C(0\ 0\ 0\ 1\ 0\ 0) = 429 = (3\ 1)(11\ 1)(13\ 1)$
 $C(0\ 0\ 1\ 0\ 0\ 0) = 208 = (2\ 4)(13\ 1)$
 $C(0\ 1\ 0\ 0\ 0\ 0) = 65 = (5\ 1)(13\ 1)$
 $C(1\ 0\ 0\ 0\ 0\ 0) = 12 = (2\ 2)(3\ 1)$

 $C(0\ 0\ 0\ 0\ 0\ 2) = 40898 = (2\ 1)(11\ 2)(13\ 2)$
 $C(0\ 0\ 0\ 0\ 1\ 1) = 89232 = (2\ 4)(3\ 1)(11\ 1)(13\ 2)$
 $C(0\ 0\ 0\ 1\ 0\ 1) = 92950 = (2\ 1)(5\ 2)(11\ 1)(13\ 2)$
 $C(0\ 0\ 1\ 0\ 0\ 1) = 57200 = (2\ 4)(5\ 2)(11\ 1)(13\ 1)$
 $C(0\ 1\ 0\ 0\ 0\ 1) = 21450 = (2\ 1)(3\ 1)(5\ 2)(11\ 1)(13\ 1)$
 $C(1\ 0\ 0\ 0\ 0\ 1) = 4576 = (2\ 5)(11\ 1)(13\ 1)$
 $C(0\ 0\ 0\ 0\ 2\ 0) = 78078 = (2\ 1)(3\ 1)(7\ 1)(11\ 1)(13\ 2)$
 $C(0\ 0\ 0\ 1\ 1\ 0) = 104104 = (2\ 3)(7\ 1)(11\ 1)(13\ 2)$
 $C(0\ 0\ 1\ 0\ 1\ 0) = 70070 = (2\ 1)(5\ 1)(7\ 2)(11\ 1)(13\ 1)$
 $C(0\ 1\ 0\ 0\ 1\ 0) = 27456 = (2\ 6)(3\ 1)(11\ 1)(13\ 1)$
 $C(1\ 0\ 0\ 0\ 1\ 0) = 6006 = (2\ 1)(3\ 1)(7\ 1)(11\ 1)(13\ 1)$
 $C(0\ 0\ 0\ 2\ 0\ 0) = 49686 = (2\ 1)(3\ 1)(7\ 2)(13\ 2)$
 $C(0\ 0\ 1\ 1\ 0\ 0) = 43680 = (2\ 5)(3\ 1)(5\ 1)(7\ 1)(13\ 1)$
 $C(0\ 1\ 0\ 1\ 0\ 0) = 18954 = (2\ 1)(3\ 6)(13\ 1)$
 $C(1\ 0\ 0\ 1\ 0\ 0) = 4368 = (2\ 4)(3\ 1)(7\ 1)(13\ 1)$
 $C(0\ 0\ 2\ 0\ 0\ 0) = 13650 = (2\ 1)(3\ 1)(5\ 2)(7\ 1)(13\ 1)$
 $C(0\ 1\ 1\ 0\ 0\ 0) = 7800 = (2\ 3)(3\ 1)(5\ 2)(13\ 1)$
 $C(1\ 0\ 1\ 0\ 0\ 0) = 2002 = (2\ 1)(7\ 1)(11\ 1)(13\ 1)$
 $C(0\ 2\ 0\ 0\ 0\ 0) = 1650 = (2\ 1)(3\ 1)(5\ 2)(11\ 1)$
 $C(1\ 1\ 0\ 0\ 0\ 0) = 560 = (2\ 4)(5\ 1)(7\ 1)$
 $C(2\ 0\ 0\ 0\ 0\ 0) = 78 = (2\ 1)(3\ 1)(13\ 1)$



$D(0\ 0\ 0\ 0\ 0\ 1) = 32 = (2\ 5)$
 $D(0\ 0\ 0\ 0\ 1\ 0) = 32 = (2\ 5)$
 $D(0\ 0\ 0\ 1\ 0\ 0) = 495 = (3\ 2)(5\ 1)(11\ 1)$
 $D(0\ 0\ 1\ 0\ 0\ 0) = 220 = (2\ 2)(5\ 1)(11\ 1)$
 $D(0\ 1\ 0\ 0\ 0\ 0) = 66 = (2\ 1)(3\ 1)(11\ 1)$
 $D(1\ 0\ 0\ 0\ 0\ 0) = 12 = (2\ 2)(3\ 1)$

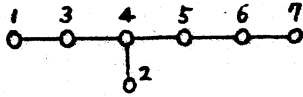
 $D(0\ 0\ 0\ 0\ 0\ 2) = 462 = (2\ 1)(3\ 1)(7\ 1)(11\ 1)$
 $D(0\ 0\ 0\ 0\ 1\ 1) = 792 = (2\ 3)(3\ 2)(11\ 1)$
 $D(0\ 0\ 0\ 1\ 0\ 1) = 8800 = (2\ 5)(5\ 2)(11\ 1)$
 $D(0\ 0\ 1\ 0\ 0\ 1) = 4928 = (2\ 6)(7\ 1)(11\ 1)$
 $D(0\ 1\ 0\ 0\ 0\ 1) = 1728 = (2\ 6)(3\ 3)$
 $D(1\ 0\ 0\ 0\ 0\ 1) = 352 = (2\ 5)(11\ 1)$
 $D(0\ 0\ 0\ 0\ 2\ 0) = 462 = (2\ 1)(3\ 1)(7\ 1)(11\ 1)$
 $D(0\ 0\ 0\ 1\ 1\ 0) = 8800 = (2\ 5)(5\ 2)(11\ 1)$
 $D(0\ 0\ 1\ 0\ 1\ 0) = 4928 = (2\ 6)(7\ 1)(11\ 1)$
 $D(0\ 1\ 0\ 0\ 1\ 0) = 1728 = (2\ 6)(3\ 3)$
 $D(1\ 0\ 0\ 0\ 1\ 0) = 352 = (2\ 5)(11\ 1)$
 $D(0\ 0\ 0\ 2\ 0\ 0) = 55055 = (5\ 1)(7\ 1)(11\ 2)(13\ 1)$
 $D(0\ 0\ 1\ 1\ 0\ 0) = 48048 = (2\ 4)(3\ 1)(7\ 1)(11\ 1)(13\ 1)$
 $D(0\ 1\ 0\ 1\ 0\ 0) = 21021 = (3\ 1)(7\ 2)(11\ 1)(13\ 1)$
 $D(1\ 0\ 0\ 1\ 0\ 0) = 4928 = (2\ 6)(7\ 1)(11\ 1)$
 $D(0\ 0\ 2\ 0\ 0\ 0) = 14014 = (2\ 1)(7\ 2)(11\ 1)(13\ 1)$
 $D(0\ 1\ 1\ 0\ 0\ 0) = 8008 = (2\ 3)(7\ 1)(11\ 1)(13\ 1)$
 $D(1\ 0\ 1\ 0\ 0\ 0) = 2079 = (3\ 3)(7\ 1)(11\ 1)$
 $D(0\ 2\ 0\ 0\ 0\ 0) = 1638 = (2\ 1)(3\ 2)(7\ 1)(13\ 1)$
 $D(1\ 1\ 0\ 0\ 0\ 0) = 560 = (2\ 4)(5\ 1)(7\ 1)$
 $D(2\ 0\ 0\ 0\ 0\ 0) = 77 = (7\ 1)(11\ 1)$



$E(0\ 0\ 0\ 1\ 0\ 0) = 2925 = (3\ 2)(5\ 2)(13\ 1)$
 $E(0\ 0\ 1\ 0\ 0\ 0) = 351 = (3\ 3)(13\ 1)$
 $E(0\ 1\ 0\ 0\ 0\ 0) = 78 = (2\ 1)(3\ 1)(13\ 1)$
 $E(1\ 0\ 0\ 0\ 0\ 0) = 27 = (3\ 3)$

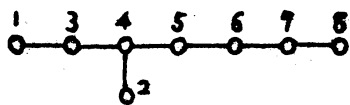
 $E(1\ 0\ 0\ 0\ 0\ 1) = 650 = (2\ 1)(5\ 2)(13\ 1)$
 $E(0\ 0\ 1\ 0\ 1\ 0) = 70070 = (2\ 1)(5\ 1)(7\ 2)(11\ 1)(13\ 1)$
 $E(1\ 0\ 0\ 0\ 1\ 0) = 7371 = (3\ 4)(7\ 1)(13\ 1)$
 $E(0\ 0\ 0\ 2\ 0\ 0) = 1337050 = (2\ 1)(5\ 2)(11\ 2)(13\ 1)(17\ 1)$
 $E(0\ 0\ 1\ 1\ 0\ 0) = 386100 = (2\ 2)(3\ 3)(5\ 2)(11\ 1)(13\ 1)$
 $E(0\ 1\ 0\ 1\ 0\ 0) = 105600 = (2\ 7)(3\ 1)(5\ 2)(11\ 1)$
 $E(1\ 0\ 0\ 1\ 0\ 0) = 51975 = (3\ 3)(5\ 2)(7\ 1)(11\ 1)$
 $E(0\ 0\ 2\ 0\ 0\ 0) = 34398 = (2\ 1)(3\ 3)(7\ 2)(13\ 1)$
 $E(0\ 1\ 1\ 0\ 0\ 0) = 17550 = (2\ 1)(3\ 3)(5\ 2)(13\ 1)$
 $E(1\ 0\ 1\ 0\ 0\ 0) = 5824 = (2\ 6)(7\ 1)(13\ 1)$
 $E(0\ 2\ 0\ 0\ 0\ 0) = 2430 = (2\ 1)(3\ 5)(5\ 1)$
 $E(1\ 1\ 0\ 0\ 0\ 0) = 1728 = (2\ 6)(3\ 3)$
 $E(2\ 0\ 0\ 0\ 0\ 0) = 351 = (3\ 3)(13\ 1)$

 $E(1\ 0\ 0\ 1\ 0\ 1) = 852930 = (2\ 1)(3\ 8)(5\ 1)(13\ 1)$
 $E(1\ 0\ 1\ 0\ 0\ 1) = 112320 = (2\ 6)(3\ 3)(5\ 1)(13\ 1)$
 $E(1\ 1\ 0\ 0\ 0\ 1) = 34749 = (3\ 5)(11\ 1)(13\ 1)$
 $E(2\ 0\ 0\ 0\ 0\ 1) = 7722 = (2\ 1)(3\ 3)(11\ 1)(13\ 1)$
 $E(1\ 0\ 0\ 0\ 2\ 0) = 600600 = (2\ 3)(3\ 1)(5\ 2)(7\ 1)(11\ 1)(13\ 1)$
 $E(0\ 0\ 1\ 1\ 1\ 0) = 34906950 = (2\ 1)(3\ 5)(5\ 2)(13\ 2)(17\ 1)$
 $E(1\ 0\ 0\ 1\ 1\ 0) = 5776056 = (2\ 3)(3\ 3)(11\ 2)(13\ 1)(17\ 1)$
 $E(0\ 0\ 2\ 0\ 1\ 0) = 4582656 = (2\ 8)(3\ 4)(13\ 1)(17\ 1)$
 $E(0\ 1\ 1\ 0\ 1\ 0) = 2453814 = (2\ 1)(3\ 8)(11\ 1)(17\ 1)$
 $E(1\ 0\ 1\ 0\ 1\ 0) = 967680 = (2\ 10)(3\ 3)(5\ 1)(7\ 1)$
 $E(1\ 1\ 0\ 0\ 1\ 0) = 314496 = (2\ 7)(3\ 3)(7\ 1)(13\ 1)$
 $E(2\ 0\ 0\ 0\ 1\ 0) = 78975 = (3\ 5)(5\ 2)(13\ 1)$
 $E(0\ 0\ 0\ 3\ 0\ 0) = 200449886 = (2\ 1)(7\ 4)(13\ 3)(19\ 1)$
 $E(0\ 0\ 1\ 2\ 0\ 0) = 93459366 = (2\ 1)(3\ 3)(7\ 2)(11\ 1)(13\ 2)(19\ 1)$
 $E(0\ 1\ 0\ 2\ 0\ 0) = 29422393 = (7\ 2)(11\ 1)(13\ 2)(17\ 1)(19\ 1)$
 $E(1\ 0\ 0\ 2\ 0\ 0) = 17918901 = (3\ 4)(7\ 1)(11\ 1)(13\ 2)(17\ 1)$
 $E(0\ 0\ 2\ 1\ 0\ 0) = 19297278 = (2\ 1)(3\ 4)(7\ 2)(11\ 1)(13\ 1)(17\ 1)$
 $E(0\ 1\ 1\ 1\ 0\ 0) = 10378368 = (2\ 7)(3\ 4)(7\ 1)(11\ 1)(13\ 1)$
 $E(1\ 0\ 1\ 1\ 0\ 0) = 4752384 = (2\ 10)(3\ 1)(7\ 1)(13\ 1)(17\ 1)$
 $E(0\ 2\ 0\ 1\ 0\ 0) = 1911195 = (3\ 5)(5\ 1)(11\ 2)(13\ 1)$
 $E(1\ 1\ 0\ 1\ 0\ 0) = 1640925 = (3\ 3)(5\ 2)(11\ 1)(13\ 1)(17\ 1)$
 $E(2\ 0\ 0\ 1\ 0\ 0) = 494208 = (2\ 7)(3\ 3)(11\ 1)(13\ 1)$
 $E(0\ 0\ 3\ 0\ 0\ 0) = 1559376 = (2\ 4)(3\ 2)(7\ 2)(13\ 1)(17\ 1)$
 $E(0\ 1\ 2\ 0\ 0\ 0) = 1253070 = (2\ 1)(3\ 4)(5\ 1)(7\ 1)(13\ 1)(17\ 1)$
 $E(1\ 0\ 2\ 0\ 0\ 0) = 412776 = (2\ 3)(3\ 4)(7\ 2)(13\ 1)$
 $E(0\ 2\ 1\ 0\ 0\ 0) = 393822 = (2\ 1)(3\ 4)(11\ 1)(13\ 1)(17\ 1)$
 $E(1\ 1\ 1\ 0\ 0\ 0) = 252252 = (2\ 2)(3\ 2)(7\ 2)(11\ 1)(13\ 1)$
 $E(2\ 0\ 1\ 0\ 0\ 0) = 54054 = (2\ 1)(3\ 3)(7\ 1)(11\ 1)(13\ 1)$
 $E(0\ 3\ 0\ 0\ 0\ 0) = 43758 = (2\ 1)(3\ 2)(11\ 1)(13\ 1)(17\ 1)$
 $E(1\ 2\ 0\ 0\ 0\ 0) = 46332 = (2\ 2)(3\ 4)(11\ 1)(13\ 1)$
 $E(2\ 1\ 0\ 0\ 0\ 0) = 19305 = (3\ 3)(5\ 1)(11\ 1)(13\ 1)$
 $E(3\ 0\ 0\ 0\ 0\ 0) = 3003 = (3\ 1)(7\ 1)(11\ 1)(13\ 1)$



$E(0\ 0\ 0\ 0\ 0\ 0\ 1) = 56 = (2\ 3)(7\ 1)$
 $E(0\ 0\ 0\ 0\ 0\ 1\ 0) = 1539 = (3\ 4)(19\ 1)$
 $E(0\ 0\ 0\ 0\ 1\ 0\ 0) = 27664 = (2\ 4)(7\ 1)(13\ 1)(19\ 1)$
 $E(0\ 0\ 0\ 1\ 0\ 0\ 0) = 365750 = (2\ 1)(5\ 3)(7\ 1)(11\ 1)(19\ 1)$
 $E(0\ 0\ 1\ 0\ 0\ 0\ 0) = 8645 = (5\ 1)(7\ 1)(13\ 1)(19\ 1)$
 $E(0\ 1\ 0\ 0\ 0\ 0\ 0) = 912 = (2\ 4)(3\ 1)(19\ 1)$
 $E(1\ 0\ 0\ 0\ 0\ 0\ 0) = 133 = (7\ 1)(19\ 1)$

$E(0\ 0\ 0\ 0\ 0\ 0\ 2) = 1463 = (7\ 1)(11\ 1)(19\ 1)$
 $E(0\ 0\ 0\ 0\ 0\ 1\ 1) = 51072 = (2\ 7)(3\ 1)(7\ 1)(19\ 1)$
 $E(0\ 0\ 0\ 0\ 1\ 0\ 1) = 980343 = (3\ 4)(7\ 2)(13\ 1)(19\ 1)$
 $E(0\ 0\ 0\ 1\ 0\ 0\ 1) = 13069056 = (2\ 8)(3\ 1)(7\ 1)(11\ 1)(13\ 1)(17\ 1)$
 $E(0\ 0\ 1\ 0\ 0\ 0\ 1) = 362880 = (2\ 7)(3\ 4)(5\ 1)(7\ 1)$
 $E(0\ 1\ 0\ 0\ 0\ 0\ 1) = 40755 = (3\ 1)(5\ 1)(11\ 1)(13\ 1)(19\ 1)$
 $E(1\ 0\ 0\ 0\ 0\ 0\ 1) = 6480 = (2\ 4)(3\ 4)(5\ 1)$
 $E(0\ 0\ 0\ 0\ 0\ 2\ 0) = 617253 = (3\ 1)(7\ 2)(13\ 1)(17\ 1)(19\ 1)$
 $E(0\ 0\ 0\ 0\ 1\ 1\ 0) = 14910896 = (2\ 4)(7\ 3)(11\ 1)(13\ 1)(19\ 1)$
 $E(0\ 0\ 0\ 1\ 0\ 1\ 0) = 209868813 = (3\ 4)(7\ 2)(11\ 2)(19\ 1)(23\ 1)$
 $E(0\ 0\ 1\ 0\ 0\ 1\ 0) = 7142499 = (3\ 5)(7\ 1)(13\ 1)(17\ 1)(19\ 1)$
 $E(0\ 1\ 0\ 0\ 0\ 1\ 0) = 861840 = (2\ 4)(3\ 4)(5\ 1)(7\ 1)(19\ 1)$
 $E(1\ 0\ 0\ 0\ 0\ 1\ 0) = 152152 = (2\ 3)(7\ 1)(11\ 1)(13\ 1)(19\ 1)$
 $E(0\ 0\ 0\ 0\ 2\ 0\ 0) = 109120648 = (2\ 3)(7\ 4)(13\ 1)(19\ 1)(23\ 1)$
 $E(0\ 0\ 0\ 1\ 1\ 0\ 0) = 1903725824 = (2\ 8)(7\ 1)(11\ 1)(13\ 1)(17\ 1)(19\ 1)(23\ 1)$
 $E(0\ 0\ 1\ 0\ 1\ 0\ 0) = 86141440 = (2\ 9)(5\ 1)(7\ 1)(11\ 1)(19\ 1)(23\ 1)$
 $E(0\ 1\ 0\ 0\ 1\ 0\ 0) = 11316305 = (5\ 1)(7\ 2)(11\ 1)(13\ 1)(17\ 1)(19\ 1)$
 $E(1\ 0\ 0\ 0\ 1\ 0\ 0) = 2282280 = (2\ 3)(3\ 1)(5\ 1)(7\ 1)(11\ 1)(13\ 1)(19\ 1)$
 $E(0\ 0\ 0\ 2\ 0\ 0\ 0) = 9183989815 = (5\ 1)(7\ 1)(11\ 1)(13\ 2)(17\ 1)(19\ 2)(23\ 1)$
 $E(0\ 0\ 1\ 1\ 0\ 0\ 0) = 688400856 = (2\ 3)(3\ 4)(11\ 1)(13\ 1)(17\ 1)(19\ 1)(23\ 1)$
 $E(0\ 1\ 0\ 1\ 0\ 0\ 0) = 100677808 = (2\ 4)(7\ 1)(11\ 2)(17\ 1)(19\ 1)(23\ 1)$
 $E(1\ 0\ 0\ 1\ 0\ 0\ 0) = 24386670 = (2\ 1)(3\ 4)(5\ 1)(7\ 1)(11\ 1)(17\ 1)(23\ 1)$
 $E(0\ 0\ 2\ 0\ 0\ 0\ 0) = 13728792 = (2\ 3)(3\ 1)(7\ 1)(11\ 1)(17\ 1)(19\ 1)(23\ 1)$
 $E(0\ 1\ 1\ 0\ 0\ 0\ 0) = 3792096 = (22\ 5)(3\ 4)(7\ 1)(11\ 1)(19\ 1)$
 $E(1\ 0\ 1\ 0\ 0\ 0\ 0) = 573440 = (2\ 14)(5\ 1)(7\ 1)$
 $E(0\ 2\ 0\ 0\ 0\ 0\ 0) = 253935 = (3\ 5)(5\ 1)(11\ 1)(19\ 1)$
 $E(1\ 1\ 0\ 0\ 0\ 0\ 0) = 86184 = (2\ 3)(3\ 4)(7\ 1)(19\ 1)$
 $E(2\ 0\ 0\ 0\ 0\ 0\ 0) = 7371 = (3\ 4)(7\ 1)(13\ 1)$



$E(0\ 0\ 0\ 0\ 0\ 0\ 0\ 1) = 248 = (2\ 3)(31\ 1)$
 $E(0\ 0\ 0\ 0\ 0\ 0\ 1\ 0) = 30380 = (2\ 2)(5\ 1)(7\ 2)(31\ 1)$
 $E(0\ 0\ 0\ 0\ 0\ 1\ 0\ 0) = 2450240 = (2\ 6)(5\ 1)(13\ 1)(19\ 1)(31\ 1)$
 $E(0\ 0\ 0\ 0\ 1\ 0\ 0\ 0) = 146325270 = (2\ 1)(3\ 1)(5\ 1)(7\ 2)(13\ 2)(19\ 1)(31\ 1)$
 $E(0\ 0\ 0\ 1\ 0\ 0\ 0\ 0) = 6899079264 = (2\ 5)(3\ 1)(7\ 2)(11\ 2)(17\ 1)(23\ 1)(31\ 1)$
 $E(0\ 0\ 1\ 0\ 0\ 0\ 0\ 0) = 6696000 = (2\ 6)(3\ 3)(5\ 3)(31\ 1)$
 $E(0\ 1\ 0\ 0\ 0\ 0\ 0\ 0) = 147250 = (2\ 1)(5\ 3)(19\ 1)(31\ 1)$
 $E(1\ 0\ 0\ 0\ 0\ 0\ 0\ 0) = 3875 = (5\ 3)(31\ 1)$

$E(0\ 0\ 0\ 0\ 0\ 0\ 0\ 2) = 27000 = (2\ 3)(3\ 3)(5\ 3)$
 $E(0\ 0\ 0\ 0\ 0\ 0\ 1\ 1) = 4096000 = (2\ 15)(5\ 3)$
 $E(0\ 0\ 0\ 0\ 0\ 1\ 0\ 1) = 344452500 = (2\ 2)(3\ 9)(5\ 4)(7\ 1)$
 $E(0\ 0\ 0\ 0\ 1\ 0\ 0\ 1) = 20288765952 = (2\ 17)(3\ 5)(7\ 2)(13\ 1)$
 $E(0\ 0\ 0\ 1\ 0\ 0\ 0\ 1) = 919045960000 = (2\ 6)(5\ 4)(7\ 2)(19\ 1)(23\ 1)(29\ 1)(37\ 1)$
 $E(0\ 0\ 1\ 0\ 0\ 0\ 0\ 1) = 1094951000 = (2\ 3)(5\ 3)(11\ 1)(13\ 2)(19\ 1)(31\ 1)$
 $E(0\ 1\ 0\ 0\ 0\ 0\ 0\ 1) = 26411008 = (2\ 16)(13\ 1)(31\ 1)$
 $E(1\ 0\ 0\ 0\ 0\ 0\ 0\ 1) = 779247 = (3\ 3)(7\ 2)(19\ 1)(31\ 1)$
 $E(0\ 0\ 0\ 0\ 0\ 0\ 2\ 0) = 203205000 = (2\ 3)(3\ 1)(5\ 4)(19\ 1)(23\ 1)(31\ 1)$
 $E(0\ 0\ 0\ 0\ 0\ 1\ 1\ 0) = 21039669000 = (2\ 3)(3\ 6)(5\ 3)(7\ 2)(19\ 1)(31\ 1)$
 $E(0\ 0\ 0\ 0\ 1\ 0\ 1\ 0) = 1283242632840 = (2\ 3)(3\ 9)(5\ 1)(7\ 2)(29\ 1)(31\ 1)(37\ 1)$
 $E(0\ 0\ 0\ 1\ 0\ 0\ 1\ 0) = 56860936405000 = (2\ 3)(5\ 4)(7\ 1)(13\ 2)(17\ 2)(29\ 1)(31\ 1)(37\ 1)$
 $E(0\ 0\ 1\ 0\ 0\ 0\ 1\ 0) = 85424220000 = (2\ 5)(3\ 9)(5\ 4)(7\ 1)(31\ 1)$
 $E(0\ 1\ 0\ 0\ 0\ 0\ 1\ 0) = 2275896000 = (2\ 6)(3\ 1)(5\ 3)(7\ 1)(19\ 1)(23\ 1)(31\ 1)$
 $E(1\ 0\ 0\ 0\ 0\ 0\ 1\ 0) = 76271625 = (3\ 9)(5\ 3)(31\ 1)$
 $E(0\ 0\ 0\ 0\ 0\ 2\ 0\ 0) = 627099023250 = (2\ 1)(3\ 4)(5\ 3)(7\ 2)(19\ 1)(29\ 1)(31\ 1)(37\ 1)$
 $E(0\ 0\ 0\ 0\ 1\ 1\ 0\ 0) = 46678711926784 = (2\ 16)(7\ 2)(19\ 1)(23\ 1)(29\ 1)(31\ 1)(37\ 1)$
 $E(0\ 0\ 0\ 1\ 0\ 1\ 0\ 0) = 2118568836696000 = (2\ 6)(3\ 1)(5\ 3)(13\ 1)(19\ 2)(23\ 2)(31\ 2)(37\ 1)$
 $E(0\ 0\ 1\ 0\ 0\ 1\ 0\ 0) = 4189713446646 = (2\ 1)(3\ 8)(7\ 2)(13\ 1)(19\ 1)(23\ 1)(31\ 1)(37\ 1)$
 $E(0\ 1\ 0\ 0\ 0\ 1\ 0\ 0) = 124436480000 = (2\ 17)(5\ 4)(7\ 2)(31\ 1)$
 $E(1\ 0\ 0\ 0\ 0\ 1\ 0\ 0) = 4825673125 = (5\ 4)(7\ 2)(13\ 1)(17\ 1)(23\ 1)(31\ 1)$
 $E(0\ 0\ 0\ 0\ 2\ 0\ 0\ 0) = 923737544513280 = (2\ 8)(3\ 3)(5\ 1)(7\ 2)(23\ 2)(29\ 1)(31\ 2)(37\ 1)$
 $E(0\ 0\ 0\ 1\ 1\ 0\ 0\ 0) = 50419029523200000 = (2\ 11)(3\ 1)(5\ 5)(13\ 2)(19\ 1)(23\ 1)(31\ 2)(37\ 1)$
 $E(0\ 0\ 1\ 0\ 1\ 0\ 0\ 0) = 1424521238000000 = (2\ 6)(5\ 5)(7\ 2)(19\ 1)(23\ 1)(29\ 1)(31\ 1)(37\ 1)$
 $E(0\ 1\ 0\ 0\ 1\ 0\ 0\ 0) = 4779643627500 = (2\ 2)(3\ 1)(5\ 4)(7\ 2)(17\ 1)(23\ 1)(29\ 1)(31\ 1)(37\ 1)$
 $E(1\ 0\ 0\ 0\ 1\ 0\ 0\ 0) = 220778105625 = (3\ 6)(5\ 4)(7\ 2)(11\ 1)(29\ 1)(31\ 1)$
 $E(0\ 0\ 0\ 2\ 0\ 0\ 0\ 0) = 684252595649750400 = (2\ 7)(3\ 2)(5\ 2)(7\ 2)(13\ 4)(19\ 2)(31\ 1)(37\ 1)(41\ 1)$
 $E(0\ 0\ 1\ 1\ 0\ 0\ 0\ 0) = 3443409121522500 = (2\ 2)(3\ 9)(5\ 4)(13\ 2)(19\ 2)(31\ 1)(37\ 1)$
 $E(0\ 1\ 0\ 1\ 0\ 0\ 0\ 0) = 133449871360000 = (2\ 15)(5\ 4)(13\ 1)(19\ 1)(23\ 1)(31\ 1)(37\ 1)$
 $E(1\ 0\ 0\ 1\ 0\ 0\ 0\ 0) = 7723951192125 = (3\ 9)(5\ 3)(7\ 1)(17\ 1)(23\ 1)(31\ 1)(37\ 1)$
 $E(0\ 0\ 2\ 0\ 0\ 0\ 0\ 0) = 3754721200320 = (2\ 6)(3\ 4)(5\ 1)(17\ 2)(19\ 1)(23\ 1)(31\ 1)(37\ 1)$
 $E(0\ 1\ 1\ 0\ 0\ 0\ 0\ 0) = 267413986840 = (2\ 3)(5\ 1)(7\ 1)(11\ 1)(13\ 1)(17\ 1)(19\ 1)(23\ 1)(29\ 1)(31\ 1)$
 $E(1\ 0\ 1\ 0\ 0\ 0\ 0\ 0) = 8634368000 = (2\ 17)(5\ 3)(17\ 1)(31\ 1)$
 $E(0\ 2\ 0\ 0\ 0\ 0\ 0\ 0) = 4076399250 = (2\ 1)(3\ 3)(5\ 3)(7\ 1)(11\ 2)(23\ 1)(31\ 1)$
 $E(1\ 1\ 0\ 0\ 0\ 0\ 0\ 0) = 301694976 = (2\ 15)(3\ 3)(11\ 1)(31\ 1)$
 $E(2\ 0\ 0\ 0\ 0\ 0\ 0\ 0) = 4881384 = (2\ 3)(3\ 9)(31\ 1)$