$* 444 \quad 1 - \frac{3}{8} - \frac{3}{8} - \frac{3}{8} = -\frac{1}{8} \quad \cancel{168} \rightarrow -21 \quad \cancel{x}^{23}$

$* 443 \quad 1 - \frac{3}{8} - \frac{3}{8} - \frac{1}{3} = -\frac{1}{2} \longrightarrow -14 \quad x^{16}$

$* 433 \quad 1 - \frac{3}{8} - \frac{1}{3} - \frac{1}{3} = -\frac{1}{24} \longrightarrow -7 \quad x^9$

$* 444 \qquad\qquad -\frac{1}{8} \qquad \longrightarrow -702 \quad x^{704}$

$* 644 \quad 1 - \frac{5}{12} - \frac{3}{8} - \frac{3}{8} = -\frac{1}{6} \quad \overset{5616}{\longrightarrow} -936 \quad x^{938}$

$* 664 \quad 1 - \frac{5}{12} - \frac{5}{12} - \frac{3}{8} = -\frac{5}{24} \quad 234 \times 5 = -1170 \quad x^{1172}$

$* 663 \qquad\quad 1 - \frac{5}{12} - \frac{5}{12} - \frac{1}{3} = -\frac{1}{6} \longrightarrow -936 \quad x^{938}$

$* 633 \longrightarrow 1 - \frac{5}{12} - \frac{1}{3} - \frac{1}{3} = -\frac{1}{2} \longrightarrow -468 \quad x^{470}$

$* 666 \quad 1 - \frac{5}{12} - \frac{5}{12} - \frac{5}{12} = -\frac{1}{4} \longrightarrow -1404 \quad x^{1406}$

$* 663 \qquad\qquad\qquad\qquad -\frac{1}{6} \Longrightarrow -936 \quad x^{938}$

$* 663 \quad 1 - \frac{5}{12} - \frac{3}{8} - \frac{1}{3} \quad -\frac{1}{8} \Longrightarrow -702 \quad x^{704}$

$* 664 \qquad\qquad\qquad\qquad -\frac{1}{6} \longrightarrow -936 \quad x^{938}$

$* 663 \qquad -\frac{1}{6} \qquad\qquad -3360 \quad x^{3362}$

$* 664 \qquad -\frac{5}{24} \qquad \overset{840}{\underset{20160}{\Longrightarrow}} -4200 \quad x^{4202}$

$* 644 \qquad -\frac{1}{6} \qquad\qquad -3360 \quad x^{3362}$

$* 444 \qquad -\frac{1}{8} \qquad\qquad -2520 \quad x^{2522}$

$* 633 \qquad -\frac{1}{12} \quad \overset{20160}{\longrightarrow} -1680 \quad x^{1682}$

$\cancel{67200}$

40320