

embedding 1 [1, -3, -2, -2]

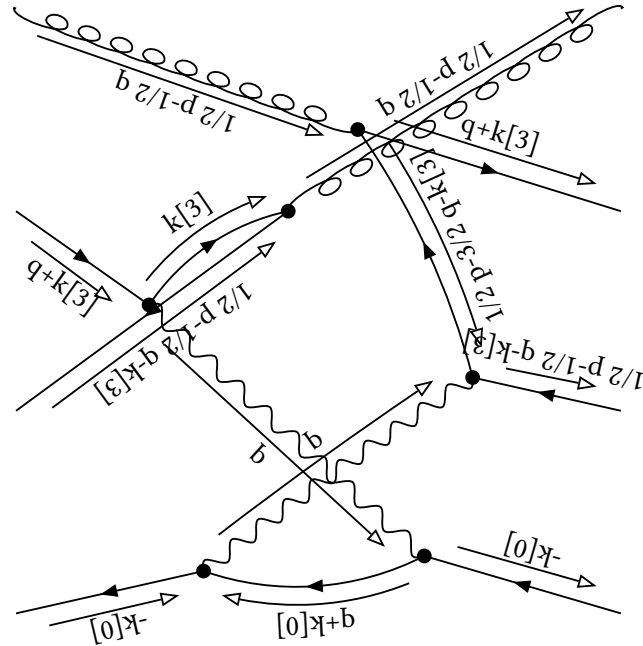
initial

Denominator:

$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p - 1/2 q]^{-1} \text{prop}[0, 1/2 p - 1/2 q - k[3]]^{-1} \text{prop}[0, 1/2 p - 3/2 q - k[3]]^{-1}$$

Partial Fractioned Denominator:

$$\begin{aligned} & -(\text{dot}[p, q] - \text{dot}[q, q])^{-1} (1/4 \text{dot}[p, p] - 1/2 \text{dot}[p, q] + 1/4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p - 1/2 q - k[3]]^{-1} \\ & +(\text{dot}[p, q] - \text{dot}[q, q])^{-1} (1/4 \text{dot}[p, p] - 1/2 \text{dot}[p, q] + 1/4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p - 3/2 q - k[3]]^{-1} \\ & +(\text{dot}[p, q] - \text{dot}[q, q])^{-1} (1/4 \text{dot}[p, p] - 1/2 \text{dot}[p, q] + 1/4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, 1/2 p - 1/2 q - k[3]]^{-1} \text{prop}[0, 1/2 p - 3/2 q - k[3]]^{-1} \\ & -(\text{dot}[p, q] - \text{dot}[q, q])^{-1} (1/4 \text{dot}[p, p] - 1/2 \text{dot}[p, q] + 1/4 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p - 1/2 q - k[3]]^{-1} \text{prop}[0, 1/2 p - 3/2 q - k[3]]^{-1} \end{aligned}$$



$$-3+8+15+16$$

final

Denominator:

0

embedding 2 [1, -2, -3, -1]

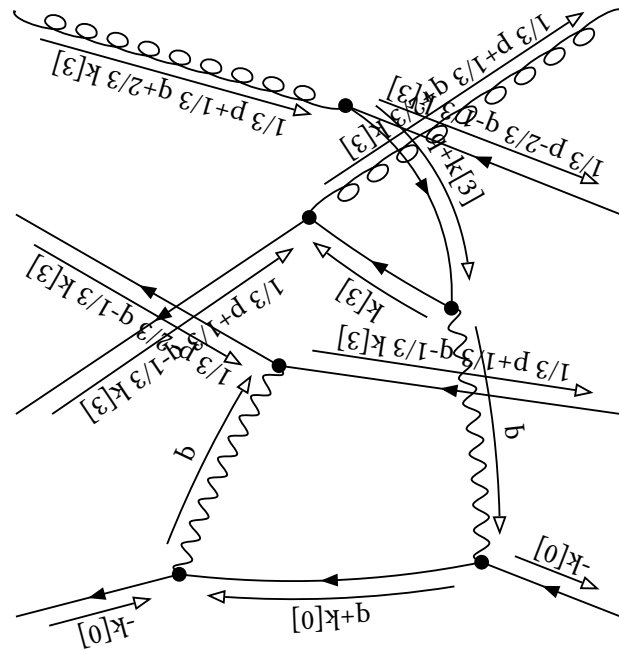
initial

Denominator:

$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/3 p+1/3 q+2/3 k[3]]^{-1} \text{prop}[0, 1/3 p+1/3 q-1/3 k[3]]^{-1} \text{prop}[0, 1/3 p-2/3 q-1/3 k[3]]^{-1}$$

Partial Fractioned Denominator:

$$\begin{aligned} & 3 \left(\frac{1}{3} \text{dot}[p, p] - \frac{2}{3} \text{dot}[p, q] + \frac{1}{3} \text{dot}[q, q] \right)^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/3 p+1/3 q+2/3 k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & + \frac{3}{2} \left(\frac{1}{3} \text{dot}[p, p] - \frac{2}{3} \text{dot}[p, q] + \frac{1}{3} \text{dot}[q, q] \right)^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/3 p-2/3 q-1/3 k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & - \left(\frac{1}{3} \text{dot}[p, p] - \frac{2}{3} \text{dot}[p, q] + \frac{1}{3} \text{dot}[q, q] \right)^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, 1/3 p+1/3 q+2/3 k[3]]^{-1} \text{prop}[0, 1/3 p-2/3 q-1/3 k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & - \left(\frac{1}{3} \text{dot}[p, p] - \frac{2}{3} \text{dot}[p, q] + \frac{1}{3} \text{dot}[q, q] \right)^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/3 p+1/3 q+2/3 k[3]]^{-1} \text{prop}[0, 1/3 p+1/3 q-1/3 k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & - \frac{1}{2} \left(\frac{1}{3} \text{dot}[p, p] - \frac{2}{3} \text{dot}[p, q] + \frac{1}{3} \text{dot}[q, q] \right)^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/3 p+1/3 q-1/3 k[3]]^{-1} \text{prop}[0, 1/3 p-2/3 q-1/3 k[3]]^{-1} \\ & \text{dot}[p, q]^{-1} \\ & + \frac{1}{3} \left(\frac{1}{3} \text{dot}[p, p] - \frac{2}{3} \text{dot}[p, q] + \frac{1}{3} \text{dot}[q, q] \right)^{-1} \text{prop}[0, 1/3 p+1/3 q+2/3 k[3]]^{-1} \text{prop}[0, 1/3 p+1/3 q-1/3 k[3]]^{-1} \text{prop}[0, 1/3 p-2/3 q-1/3 \\ & k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & - 3 \left(\frac{1}{3} \text{dot}[p, p] + \frac{2}{3} \text{dot}[p, q] + \frac{1}{3} \text{dot}[q, q] \right)^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/3 p+1/3 q+2/3 k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & - \frac{3}{2} \left(\frac{1}{3} \text{dot}[p, p] + \frac{2}{3} \text{dot}[p, q] + \frac{1}{3} \text{dot}[q, q] \right)^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/3 p+1/3 q-1/3 k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & + \left(\frac{1}{3} \text{dot}[p, p] + \frac{2}{3} \text{dot}[p, q] + \frac{1}{3} \text{dot}[q, q] \right)^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, 1/3 p+1/3 q+2/3 k[3]]^{-1} \text{prop}[0, 1/3 p-2/3 q-1/3 k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & + \frac{1}{2} \left(\frac{1}{3} \text{dot}[p, p] + \frac{2}{3} \text{dot}[p, q] + \frac{1}{3} \text{dot}[q, q] \right)^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, 1/3 p+1/3 q-1/3 k[3]]^{-1} \text{prop}[0, 1/3 p-2/3 q-1/3 k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & + \left(\frac{1}{3} \text{dot}[p, p] + \frac{2}{3} \text{dot}[p, q] + \frac{1}{3} \text{dot}[q, q] \right)^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/3 p+1/3 q+2/3 k[3]]^{-1} \text{prop}[0, 1/3 p+1/3 q-1/3 k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & - \frac{1}{3} \left(\frac{1}{3} \text{dot}[p, p] + \frac{2}{3} \text{dot}[p, q] + \frac{1}{3} \text{dot}[q, q] \right)^{-1} \text{prop}[0, 1/3 p+1/3 q+2/3 k[3]]^{-1} \text{prop}[0, 1/3 p+1/3 q-1/3 k[3]]^{-1} \text{prop}[0, 1/3 p-2/3 q-1/3 \\ & k[3]]^{-1} \text{dot}[p, q]^{-1} \end{aligned}$$



$$-3+8+10+16$$

final

Denominator:

0

embedding 3 [1, -2, -2, -2]

initial

Denominator:

0

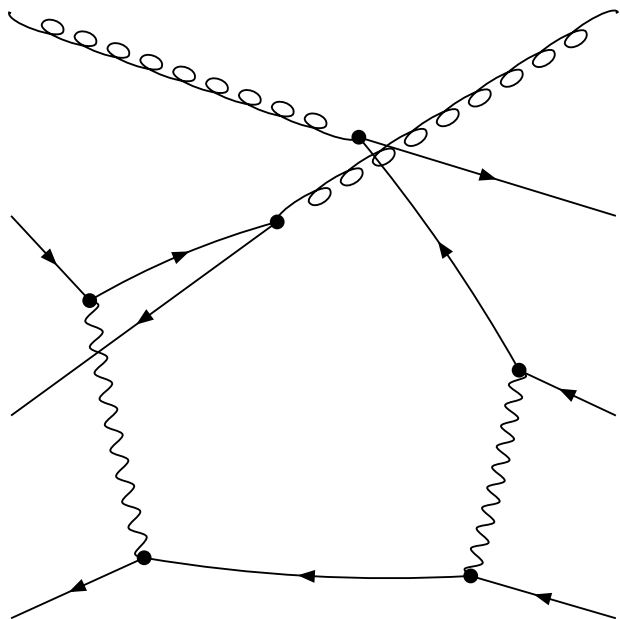
Partial Fractioned Denominator:

0

final

Denominator:

$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,1/2 \ p-1/2 \ q]^{-1} \text{prop}[0,1/2 \ p-1/2 \ q-k[3]]^{-1} \text{prop}[0,1/2 \ p-3/2 \ q-k[3]]^{-1}$



$-1+8+15+16$

embedding 4 [1, -2, -2, -1]

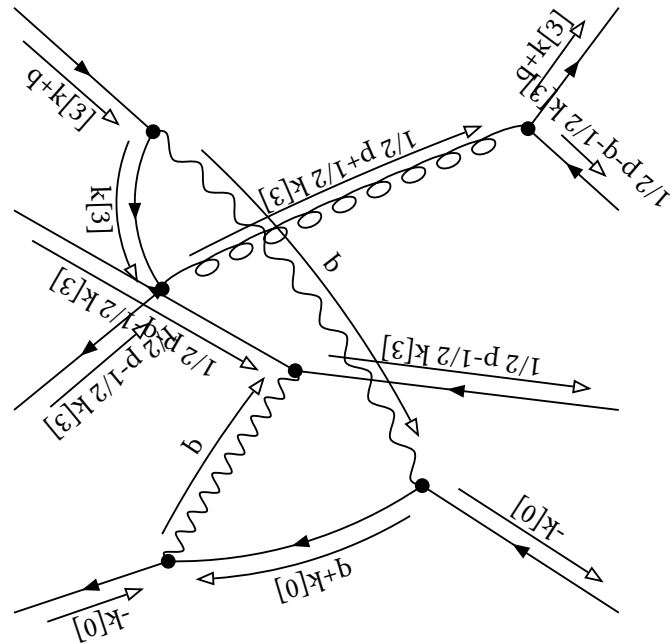
initial

Denominator:

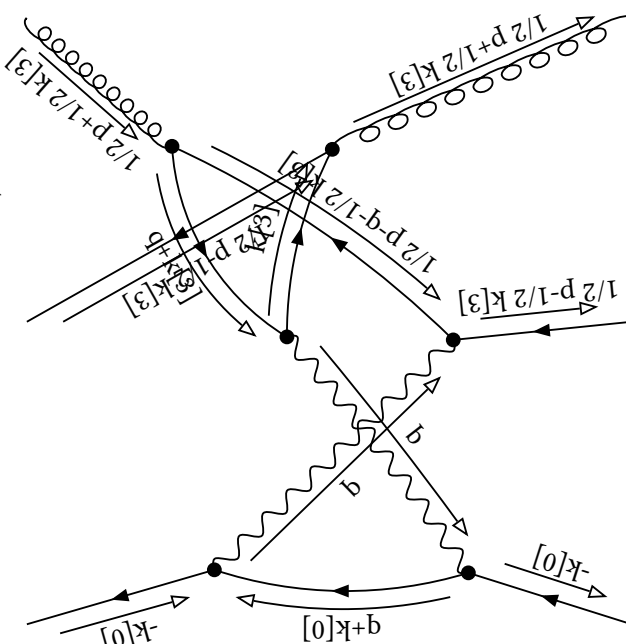
$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 k[3]]^{-1} \text{prop}[0, 1/2 p-1/2 k[3]]^{-1} \text{prop}[0, 1/2 p-q-1/2 k[3]]^{-1}$$

Partial Fractioned Denominator:

$$\begin{aligned} & 2 (2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] - \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 k[3]]^{-1} \\ & + 2 (2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] - \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p-q-1/2 k[3]]^{-1} \\ & - (2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] - \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 k[3]]^{-1} \text{prop}[0, 1/2 p-q-1/2 k[3]]^{-1} \\ & - (2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] - \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 k[3]]^{-1} \text{prop}[0, 1/2 p-1/2 k[3]]^{-1} \\ & - (2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] - \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p-1/2 k[3]]^{-1} \text{prop}[0, 1/2 p-q-1/2 k[3]]^{-1} \\ & + 1/2 (2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] - \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, 1/2 p+1/2 k[3]]^{-1} \text{prop}[0, 1/2 p-1/2 k[3]]^{-1} \text{prop}[0, 1/2 p-q-1/2 k[3]]^{-1} \\ & k[3]]^{-1} \\ & - 4 (2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & - 4 (2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p-1/2 k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & + 2 (2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 k[3]]^{-1} \text{prop}[0, 1/2 p-q-1/2 k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & + 2 (2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, 1/2 p-1/2 k[3]]^{-1} \text{prop}[0, 1/2 p-q-1/2 k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & + 2 (2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 k[3]]^{-1} \text{prop}[0, 1/2 p-1/2 k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & - (2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} \text{prop}[0, 1/2 p+1/2 k[3]]^{-1} \text{prop}[0, 1/2 p-1/2 k[3]]^{-1} \text{prop}[0, 1/2 p-q-1/2 k[3]]^{-1} \text{dot}[p, p]^{-1} \end{aligned}$$



-3+8+10+15



-3+8+16

final

Denominator:

0

embedding 5 $[1, -2, -1, -3]$

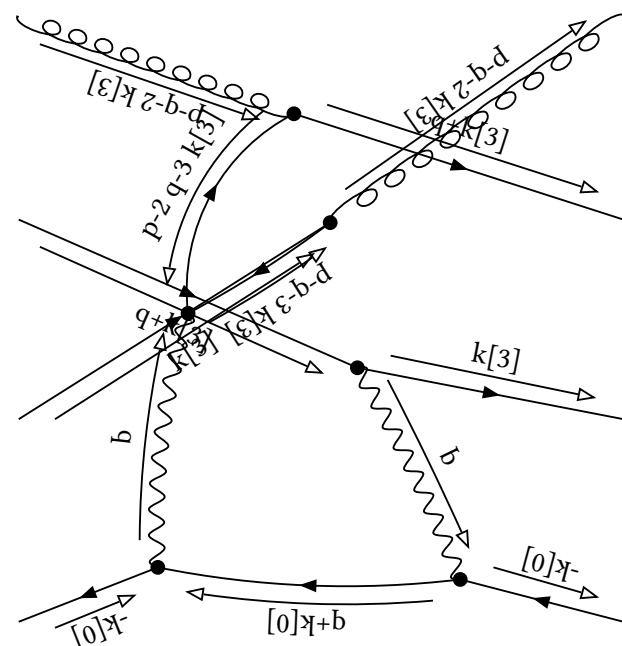
initial

Denominator:

$$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p-q-2 \ k[3]]^{-1} \text{prop}[0,p-q-3 \ k[3]]^{-1} \text{prop}[0,p-2 \ q-3 \ k[3]]^{-1}$$

Partial Fractioned Denominator:

$$\begin{aligned} & 1/3 (1/3 \text{ dot}[p,p]-2/3 \text{ dot}[p,q]+1/3 \text{ dot}[q,q])^{-1} \text{ prop}[0,k[3]]^{-1} \text{ prop}[0,q+k[3]]^{-1} \text{ prop}[0,p-q-2 k[3]]^{-1} \text{ dot}[p,q]^{-1} \\ & -1/2 (1/3 \text{ dot}[p,p]-2/3 \text{ dot}[p,q]+1/3 \text{ dot}[q,q])^{-1} \text{ prop}[0,k[3]]^{-1} \text{ prop}[0,q+k[3]]^{-1} \text{ prop}[0,p-q-3 k[3]]^{-1} \text{ dot}[p,q]^{-1} \\ & -(1/3 \text{ dot}[p,p]-2/3 \text{ dot}[p,q]+1/3 \text{ dot}[q,q])^{-1} \text{ prop}[0,k[3]]^{-1} \text{ prop}[0,p-q-2 k[3]]^{-1} \text{ prop}[0,p-2 q-3 k[3]]^{-1} \text{ dot}[p,q]^{-1} \\ & +3/2 (1/3 \text{ dot}[p,p]-2/3 \text{ dot}[p,q]+1/3 \text{ dot}[q,q])^{-1} \text{ prop}[0,k[3]]^{-1} \text{ prop}[0,p-q-3 k[3]]^{-1} \text{ prop}[0,p-2 q-3 k[3]]^{-1} \text{ dot}[p,q]^{-1} \\ & -(1/3 \text{ dot}[p,p]-2/3 \text{ dot}[p,q]+1/3 \text{ dot}[q,q])^{-1} \text{ prop}[0,q+k[3]]^{-1} \text{ prop}[0,p-q-2 k[3]]^{-1} \text{ prop}[0,p-q-3 k[3]]^{-1} \text{ dot}[p,q]^{-1} \\ & +3 (1/3 \text{ dot}[p,p]-2/3 \text{ dot}[p,q]+1/3 \text{ dot}[q,q])^{-1} \text{ prop}[0,p-q-2 k[3]]^{-1} \text{ prop}[0,p-q-3 k[3]]^{-1} \text{ prop}[0,p-2 q-3 k[3]]^{-1} \text{ dot}[p,q]^{-1} \\ & -1/3 (1/3 \text{ dot}[p,p]+2/3 \text{ dot}[p,q]+1/3 \text{ dot}[q,q])^{-1} \text{ prop}[0,k[3]]^{-1} \text{ prop}[0,q+k[3]]^{-1} \text{ prop}[0,p-q-2 k[3]]^{-1} \text{ dot}[p,q]^{-1} \\ & +1/2 (1/3 \text{ dot}[p,p]+2/3 \text{ dot}[p,q]+1/3 \text{ dot}[q,q])^{-1} \text{ prop}[0,k[3]]^{-1} \text{ prop}[0,q+k[3]]^{-1} \text{ prop}[0,p-2 q-3 k[3]]^{-1} \text{ dot}[p,q]^{-1} \\ & +(1/3 \text{ dot}[p,p]+2/3 \text{ dot}[p,q]+1/3 \text{ dot}[q,q])^{-1} \text{ prop}[0,k[3]]^{-1} \text{ prop}[0,p-q-2 k[3]]^{-1} \text{ prop}[0,p-2 q-3 k[3]]^{-1} \text{ dot}[p,q]^{-1} \\ & +(1/3 \text{ dot}[p,p]+2/3 \text{ dot}[p,q]+1/3 \text{ dot}[q,q])^{-1} \text{ prop}[0,q+k[3]]^{-1} \text{ prop}[0,p-q-2 k[3]]^{-1} \text{ prop}[0,p-q-3 k[3]]^{-1} \text{ dot}[p,q]^{-1} \\ & -3/2 (1/3 \text{ dot}[p,p]+2/3 \text{ dot}[p,q]+1/3 \text{ dot}[q,q])^{-1} \text{ prop}[0,q+k[3]]^{-1} \text{ prop}[0,p-q-3 k[3]]^{-1} \text{ prop}[0,p-2 q-3 k[3]]^{-1} \text{ dot}[p,q]^{-1} \\ & -3 (1/3 \text{ dot}[p,p]+2/3 \text{ dot}[p,q]+1/3 \text{ dot}[q,q])^{-1} \text{ prop}[0,p-q-2 k[3]]^{-1} \text{ prop}[0,p-q-3 k[3]]^{-1} \text{ prop}[0,p-2 q-3 k[3]]^{-1} \text{ dot}[p,q]^{-1} \end{aligned}$$



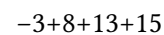
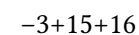
$$-3+13+15+16$$

final

Denominator:

0

initial

$$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p-q-k[3]]^{-1} \text{prop}[0,p-q-2 \ k[3]]^{-1} \text{prop}[0,p-2 \ q-2 \ k[3]]^{-1}$$
$$\begin{aligned} & 1/4 (\dot{p}[q]-1/2 \dot{q}[q])^{-1} (1/2 \dot{p}[p]-\dot{p}[q]+1/2 \dot{q}[q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p-q-k[3]]^{-1} \\ & -1/2 (\dot{p}[q]-1/2 \dot{q}[q])^{-1} (1/2 \dot{p}[p]-\dot{p}[q]+1/2 \dot{q}[q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p-q-2 k[3]]^{-1} \\ & -1/2 (\dot{p}[q]-1/2 \dot{q}[q])^{-1} (1/2 \dot{p}[p]-\dot{p}[q]+1/2 \dot{q}[q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,p-q-k[3]]^{-1} \text{prop}[0,p-2 q-2 k[3]]^{-1} \\ & +(\dot{p}[q]-1/2 \dot{q}[q])^{-1} (1/2 \dot{p}[p]-\dot{p}[q]+1/2 \dot{q}[q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,p-q-2 k[3]]^{-1} \text{prop}[0,p-2 q-2 k[3]]^{-1} \\ & -1/2 (\dot{p}[q]-1/2 \dot{q}[q])^{-1} (1/2 \dot{p}[p]-\dot{p}[q]+1/2 \dot{q}[q])^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p-q-k[3]]^{-1} \text{prop}[0,p-q-2 k[3]]^{-1} \\ & +(\dot{p}[q]-1/2 \dot{q}[q])^{-1} (1/2 \dot{p}[p]-\dot{p}[q]+1/2 \dot{q}[q])^{-1} \text{prop}[0,p-q-k[3]]^{-1} \text{prop}[0,p-q-2 k[3]]^{-1} \text{prop}[0,p-2 q-2 k[3]]^{-1} \\ & -1/2 (\dot{p}[q]-1/2 \dot{q}[q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p-q-k[3]]^{-1} \dot{p}[p]^{-1} \\ & +(\dot{p}[q]-1/2 \dot{q}[q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p-2 q-2 k[3]]^{-1} \dot{p}[p]^{-1} \\ & +(\dot{p}[q]-1/2 \dot{q}[q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,p-q-k[3]]^{-1} \text{prop}[0,p-2 q-2 k[3]]^{-1} \dot{p}[p]^{-1} \\ & +(\dot{p}[q]-1/2 \dot{q}[q])^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p-q-k[3]]^{-1} \text{prop}[0,p-q-2 k[3]]^{-1} \dot{p}[p]^{-1} \\ & -2 (\dot{p}[q]-1/2 \dot{q}[q])^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p-q-2 k[3]]^{-1} \text{prop}[0,p-2 q-2 k[3]]^{-1} \dot{p}[p]^{-1} \\ & -2 (\dot{p}[q]-1/2 \dot{q}[q])^{-1} \text{prop}[0,p-q-k[3]]^{-1} \text{prop}[0,p-q-2 k[3]]^{-1} \text{prop}[0,p-2 q-2 k[3]]^{-1} \dot{p}[p]^{-1} \end{aligned}$$


final

Denominator:

0

embedding 7 [1, -2, -1, -1]

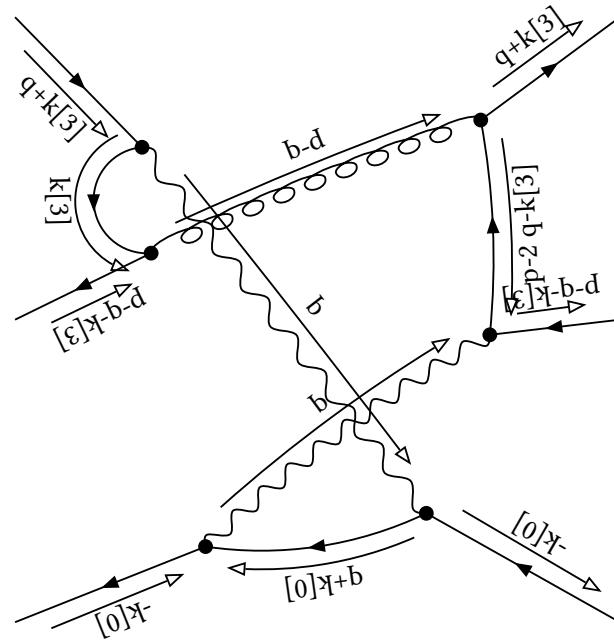
initial

Denominator:

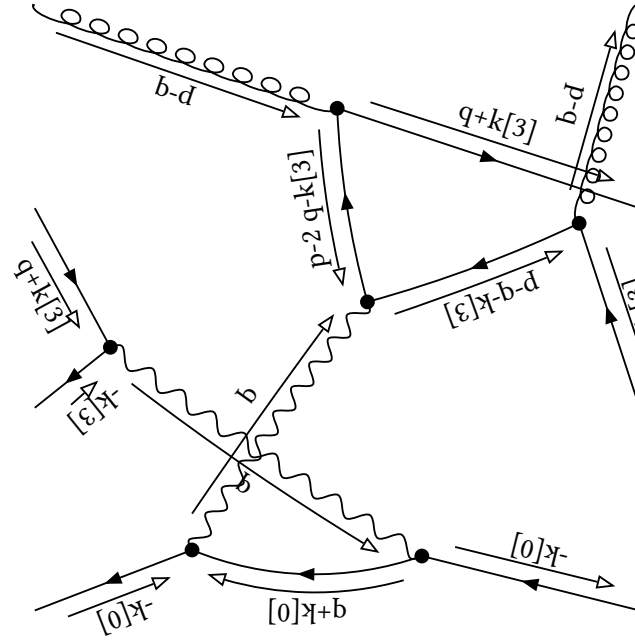
$$\text{prop}[\theta, k[3]]^{-1} \text{prop}[\theta, q+k[3]]^{-1} \text{prop}[\theta, p-q]^{-1} \text{prop}[\theta, p-q-k[3]]^{-1} \text{prop}[\theta, p-2 \ q-k[3]]^{-1}$$

Partial Fractioned Denominator:

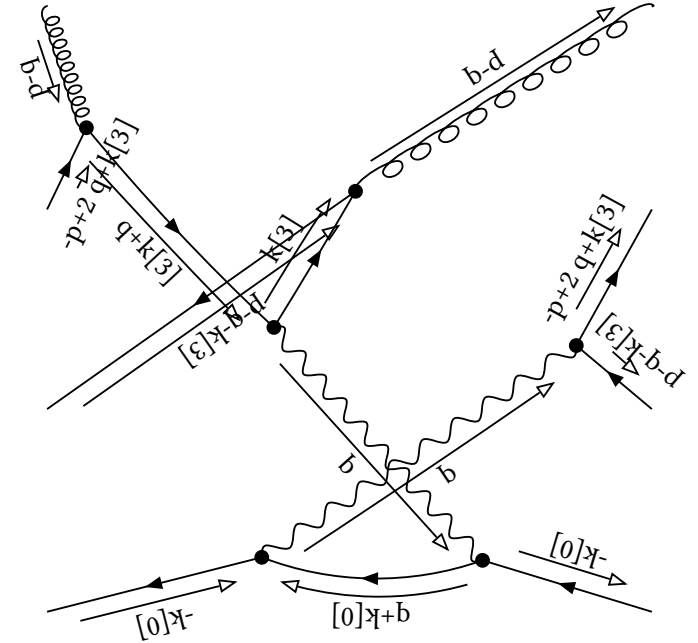
$$\begin{aligned} & -(2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} (\text{dot}[p, p] - 2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} \text{prop}[\theta, k[3]]^{-1} \text{prop}[\theta, q+k[3]]^{-1} \text{prop}[\theta, p-q-k[3]]^{-1} \\ & + (2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} (\text{dot}[p, p] - 2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} \text{prop}[\theta, k[3]]^{-1} \text{prop}[\theta, q+k[3]]^{-1} \text{prop}[\theta, p-2 \ q-k[3]]^{-1} \\ & + (2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} (\text{dot}[p, p] - 2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} \text{prop}[\theta, k[3]]^{-1} \text{prop}[\theta, p-q-k[3]]^{-1} \text{prop}[\theta, p-2 \ q-k[3]]^{-1} \\ & - (2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} (\text{dot}[p, p] - 2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} \text{prop}[\theta, q+k[3]]^{-1} \text{prop}[\theta, p-q-k[3]]^{-1} \text{prop}[\theta, p-2 \ q-k[3]]^{-1} \end{aligned}$$



-3+8+15



-3-13+15+16



-3+8-10+16

final

Denominator:

0

embedding 8 [1, -2, -1, 0]

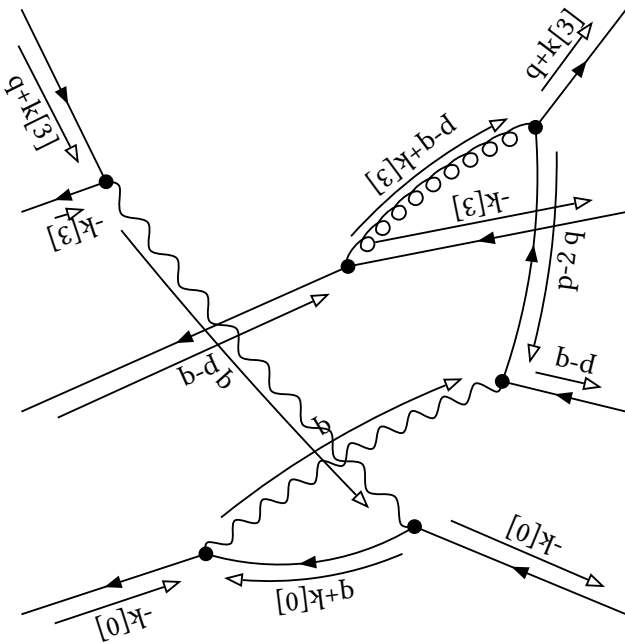
initial

Denominator:

$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p-q]^{-1} \text{prop}[0,p-2\ q]^{-1} \text{prop}[0,p-q+k[3]]^{-1}$

Partial Fractioned Denominator:

$(\text{dot}[p,p]-4\ \text{dot}[p,q]+4\ \text{dot}[q,q])^{-1} (\text{dot}[p,p]-2\ \text{dot}[p,q]+\text{dot}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p-q+k[3]]^{-1}$



$-3+8-13+15$

final

Denominator:

0

embedding 9 [1, -2, 0, -1]

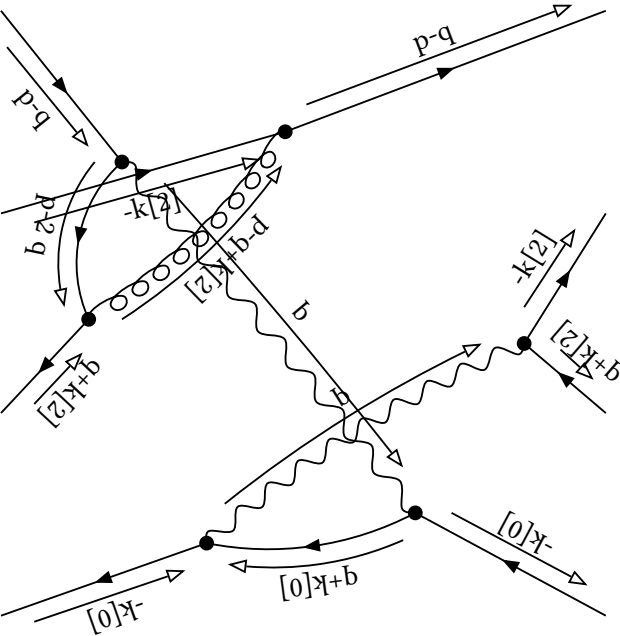
initial

Denominator:

$\text{prop}[0,k[2]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,p-q]^{-1} \text{prop}[0,p-2 \ q]^{-1} \text{prop}[0,p-q+k[2]]^{-1}$

Partial Fractioned Denominator:

$(\text{dot}[p,p]-4 \ \text{dot}[p,q]+4 \ \text{dot}[q,q])^{-1} (\text{dot}[p,p]-2 \ \text{dot}[p,q]+\text{dot}[q,q])^{-1} \text{prop}[0,k[2]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,p-q+k[2]]^{-1}$



$-3+8-10+15$

final

Denominator:

0

embedding 10 [1, -1, -3, -1]

initial

Denominator:

0

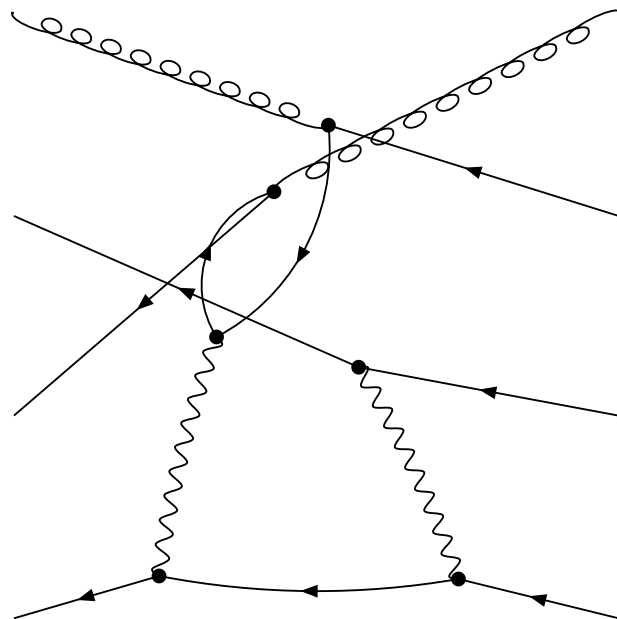
Partial Fractioned Denominator:

0

final

Denominator:

$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,1/3 \ p+1/3 \ q+2/3 \ k[3]]^{-1} \text{prop}[0,1/3 \ p+1/3 \ q-1/3 \ k[3]]^{-1} \text{prop}[0,1/3 \ p-2/3 \ q-1/3 \ k[3]]^{-1}$



-1+8+10+16

embedding 11 [1, -1, -2, -2]

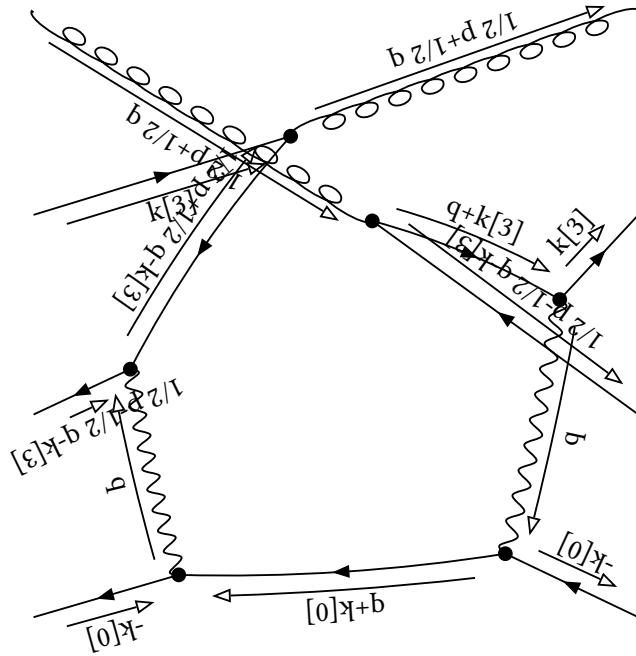
initial

Denominator:

$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 q]^{-1} \text{prop}[0, 1/2 p+1/2 q-k[3]]^{-1} \text{prop}[0, 1/2 p-1/2 q-k[3]]^{-1}$$

Partial Fractioned Denominator:

$$\begin{aligned} & -(\text{dot}[p, q] + \text{dot}[q, q])^{-1} (1/4 \text{dot}[p, p] + 1/2 \text{dot}[p, q] + 1/4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 q-k[3]]^{-1} \\ & +(\text{dot}[p, q] + \text{dot}[q, q])^{-1} (1/4 \text{dot}[p, p] + 1/2 \text{dot}[p, q] + 1/4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p-1/2 q-k[3]]^{-1} \\ & +(\text{dot}[p, q] + \text{dot}[q, q])^{-1} (1/4 \text{dot}[p, p] + 1/2 \text{dot}[p, q] + 1/4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 q-k[3]]^{-1} \text{prop}[0, 1/2 p-1/2 q-k[3]]^{-1} \\ & -(\text{dot}[p, q] + \text{dot}[q, q])^{-1} (1/4 \text{dot}[p, p] + 1/2 \text{dot}[p, q] + 1/4 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 q-k[3]]^{-1} \text{prop}[0, 1/2 p-1/2 q-k[3]]^{-1} \end{aligned}$$



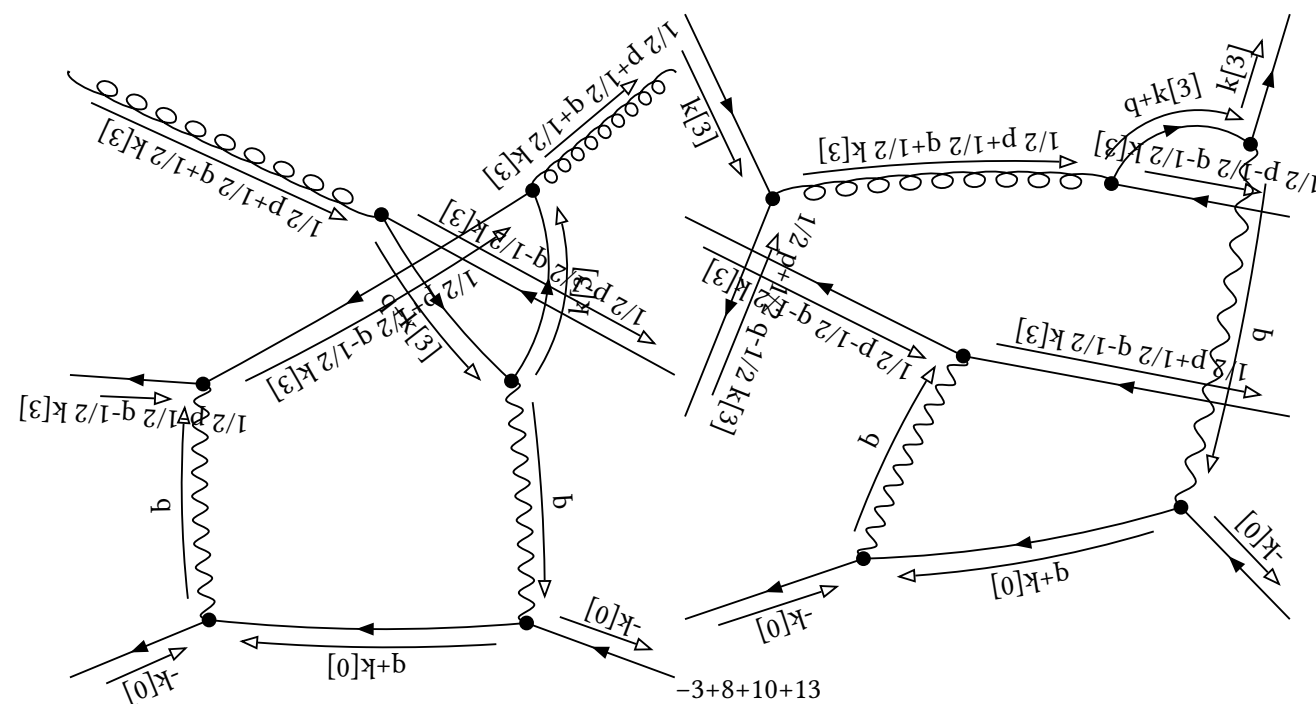
$$-3+10+13+16$$

final

Denominator:

0

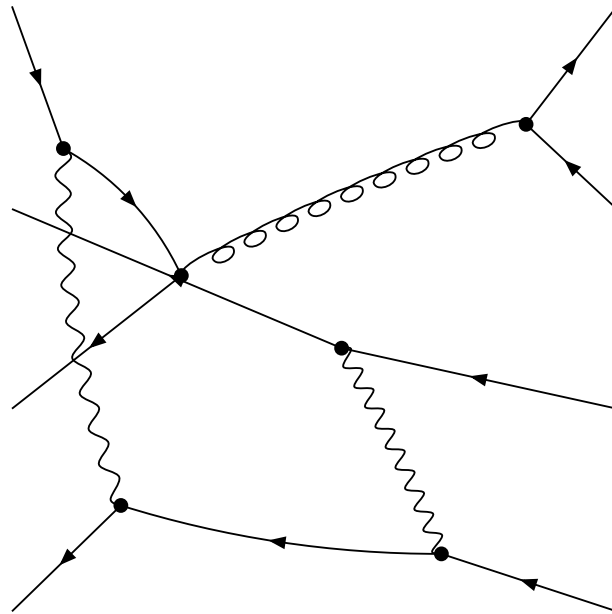
initial

$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 \text{ p}+1/2 \text{ q}+1/2 \text{ k}[3]]^{-1} \text{prop}[0, 1/2 \text{ p}+1/2 \text{ q}-1/2 \text{ k}[3]]^{-1} \text{prop}[0, 1/2 \text{ p}-1/2 \text{ q}-1/2 \text{ k}[3]]^{-1}$$
$$\begin{aligned}
& -2 (2 \text{ dot}[p,q]+\text{dot}[q,q])^{-1} (1/2 \text{ dot}[p,p]+\text{dot}[p,q]+1/2 \text{ dot}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,1/2 p+1/2 q+1/2 k[3]]^{-1} \\
& -2 (2 \text{ dot}[p,q]+\text{dot}[q,q])^{-1} (1/2 \text{ dot}[p,p]+\text{dot}[p,q]+1/2 \text{ dot}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,1/2 p+1/2 q-1/2 k[3]]^{-1} \\
& +(2 \text{ dot}[p,q]+\text{dot}[q,q])^{-1} (1/2 \text{ dot}[p,p]+\text{dot}[p,q]+1/2 \text{ dot}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,1/2 p+1/2 q+1/2 k[3]]^{-1} \text{prop}[0,1/2 p-1/2 q-1/2 \\
& k[3]]^{-1} \\
& +(2 \text{ dot}[p,q]+\text{dot}[q,q])^{-1} (1/2 \text{ dot}[p,p]+\text{dot}[p,q]+1/2 \text{ dot}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,1/2 p+1/2 q-1/2 k[3]]^{-1} \text{prop}[0,1/2 p-1/2 q-1/2 \\
& k[3]]^{-1} \\
& +(2 \text{ dot}[p,q]+\text{dot}[q,q])^{-1} (1/2 \text{ dot}[p,p]+\text{dot}[p,q]+1/2 \text{ dot}[q,q])^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,1/2 p+1/2 q+1/2 k[3]]^{-1} \text{prop}[0,1/2 p+1/2 q-1/2 \\
& k[3]]^{-1} \\
& -1/2 (2 \text{ dot}[p,q]+\text{dot}[q,q])^{-1} (1/2 \text{ dot}[p,p]+\text{dot}[p,q]+1/2 \text{ dot}[q,q])^{-1} \text{prop}[0,1/2 p+1/2 q+1/2 k[3]]^{-1} \text{prop}[0,1/2 p+1/2 q-1/2 k[3]]^{-1} \\
& \text{prop}[0,1/2 p-1/2 q-1/2 k[3]]^{-1} \\
& +4 (2 \text{ dot}[p,q]+\text{dot}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,1/2 p+1/2 q+1/2 k[3]]^{-1} \text{dot}[p,p]^{-1} \\
& +4 (2 \text{ dot}[p,q]+\text{dot}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,1/2 p-1/2 q-1/2 k[3]]^{-1} \text{dot}[p,p]^{-1} \\
& -2 (2 \text{ dot}[p,q]+\text{dot}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,1/2 p+1/2 q+1/2 k[3]]^{-1} \text{prop}[0,1/2 p-1/2 q-1/2 k[3]]^{-1} \text{dot}[p,p]^{-1} \\
& -2 (2 \text{ dot}[p,q]+\text{dot}[q,q])^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,1/2 p+1/2 q+1/2 k[3]]^{-1} \text{prop}[0,1/2 p+1/2 q-1/2 k[3]]^{-1} \text{dot}[p,p]^{-1} \\
& -2 (2 \text{ dot}[p,q]+\text{dot}[q,q])^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,1/2 p+1/2 q-1/2 k[3]]^{-1} \text{prop}[0,1/2 p-1/2 q-1/2 k[3]]^{-1} \text{dot}[p,p]^{-1} \\
& +(2 \text{ dot}[p,q]+\text{dot}[q,q])^{-1} \text{prop}[0,1/2 p+1/2 q+1/2 k[3]]^{-1} \text{prop}[0,1/2 p+1/2 q-1/2 k[3]]^{-1} \text{prop}[0,1/2 p-1/2 q-1/2 k[3]]^{-1} \text{dot}[p,p]^{-1}
\end{aligned}$$

$$-3+10+16$$

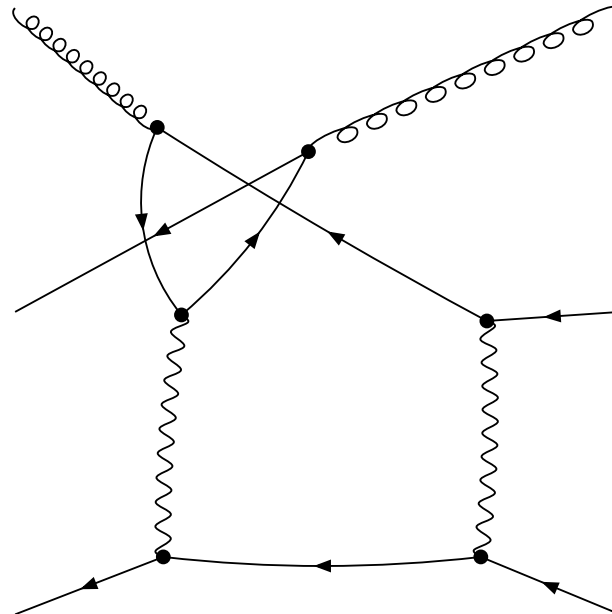
final

Denominator:

$$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,1/2 \ p+1/2 \ k[3]]^{-1} \text{prop}[0,1/2 \ p-1/2 \ k[3]]^{-1} \text{prop}[0,1/2 \ p-q-1/2 \ k[3]]^{-1}$$



$$-1+8+10+15$$



$$-1+8+16$$

embedding 13 [1, -1, -2, 0]

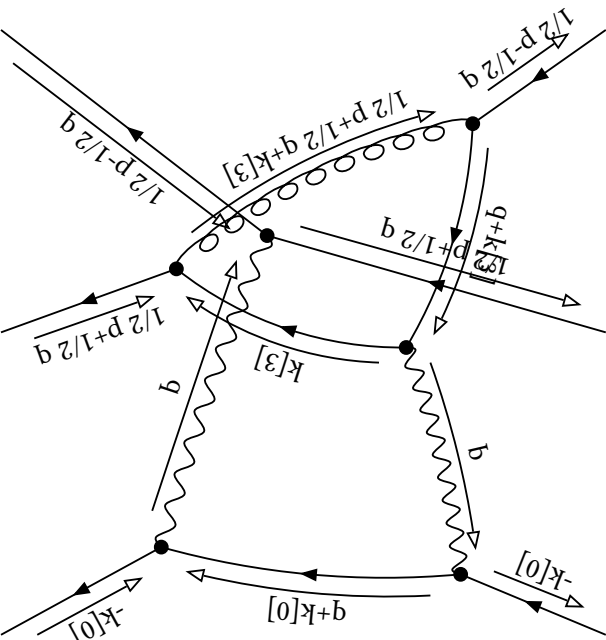
initial

Denominator:

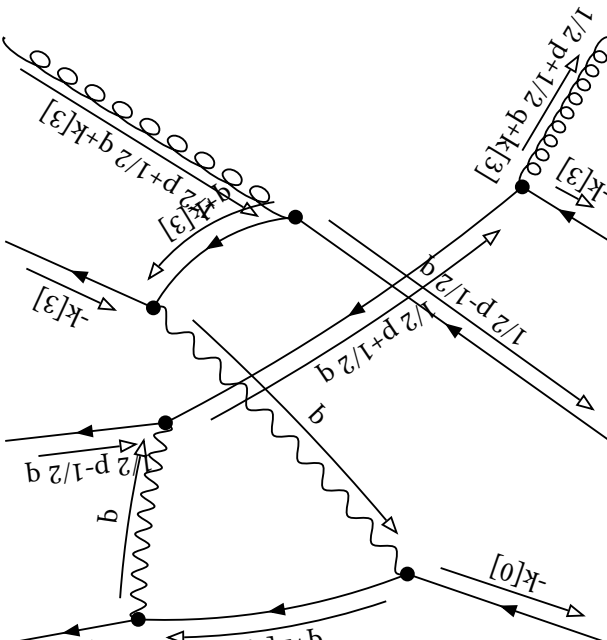
$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,1/2 \ p+1/2 \ q]^{-1} \text{prop}[0,1/2 \ p-1/2 \ q]^{-1} \text{prop}[0,1/2 \ p+1/2 \ q+k[3]]^{-1}$

Partial Fractioned Denominator:

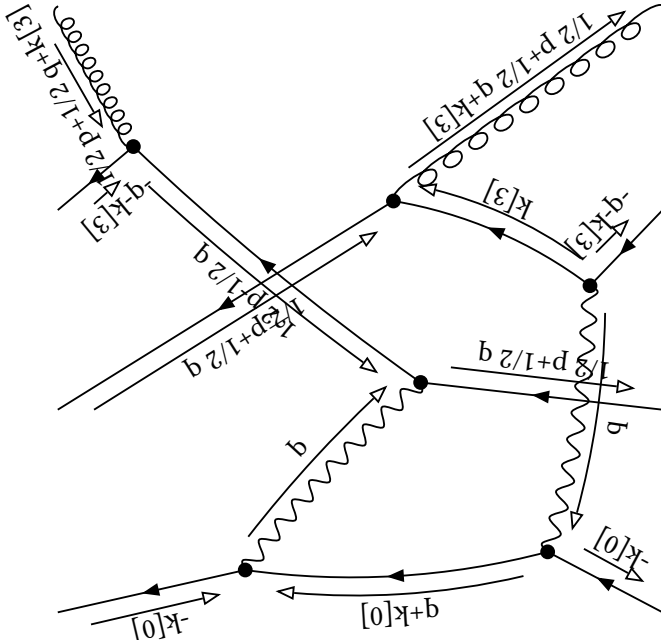
$(1/4 \text{dot}[p,p]-1/2 \text{dot}[p,q]+1/4 \text{dot}[q,q])^{-1} (1/4 \text{dot}[p,p]+1/2 \text{dot}[p,q]+1/4 \text{dot}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,1/2 \ p+1/2 \ q+k[3]]^{-1}$



-3+8+10



-3+10-13+16



-3+8-15+16

final

Denominator:

0

embedding 14 [1, -1, -2, 1]

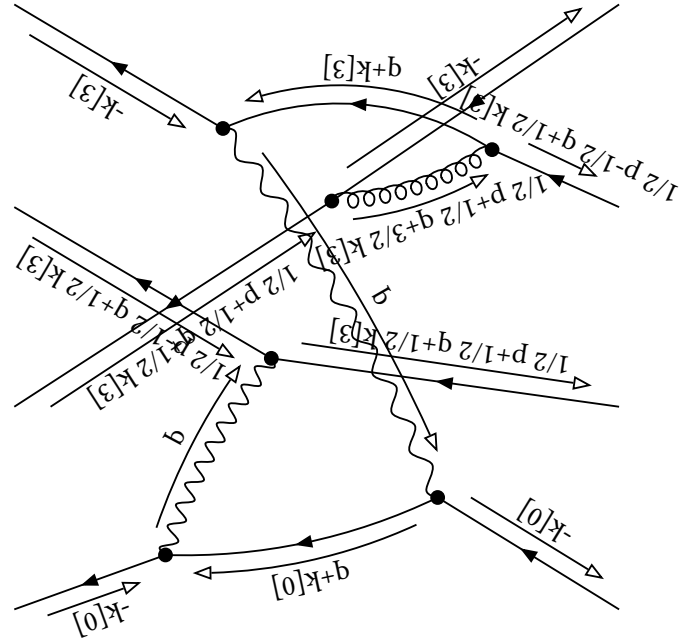
initial

Denominator:

$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 q+1/2 k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 q+3/2 k[3]]^{-1} \text{prop}[0, 1/2 p-1/2 q+1/2 k[3]]^{-1}$$

Partial Fractioned Denominator:

$$\begin{aligned} & 2 (-2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 q+1/2 k[3]]^{-1} \\ & -6 (-2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 q+3/2 k[3]]^{-1} \\ & + (-2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 q+1/2 k[3]]^{-1} \text{prop}[0, 1/2 p-1/2 q+1/2 k[3]]^{-1} \\ & -3 (-2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 q+3/2 k[3]]^{-1} \text{prop}[0, 1/2 p-1/2 q+1/2 k[3]]^{-1} \\ & -3 (-2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 q+1/2 k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 q+3/2 k[3]]^{-1} \\ & -3/2 (-2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, 1/2 p+1/2 q+1/2 k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 q+3/2 k[3]]^{-1} \\ & \text{prop}[0, 1/2 p-1/2 q+1/2 k[3]]^{-1} \\ & +6 (-2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 q+3/2 k[3]]^{-1} \\ & -2 (-2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p-1/2 q+1/2 k[3]]^{-1} \\ & +3 (-2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 q+3/2 k[3]]^{-1} \text{prop}[0, 1/2 p-1/2 q+1/2 k[3]]^{-1} \\ & k[3]]^{-1} \\ & +3 (-2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 q+1/2 k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 q+3/2 k[3]]^{-1} \\ & q+3/2 k[3]]^{-1} \\ & - (-2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 q+1/2 k[3]]^{-1} \text{prop}[0, 1/2 p-1/2 q+1/2 k[3]]^{-1} \\ & k[3]]^{-1} \\ & +3/2 (-2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, 1/2 p+1/2 q+1/2 k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 q+3/2 k[3]]^{-1} \\ & \text{prop}[0, 1/2 p-1/2 q+1/2 k[3]]^{-1} \end{aligned}$$



$$-3+8+10-13$$

final

Denominator:

0

embedding 15 [1, -1, -1, -3]

initial

Denominator:

0

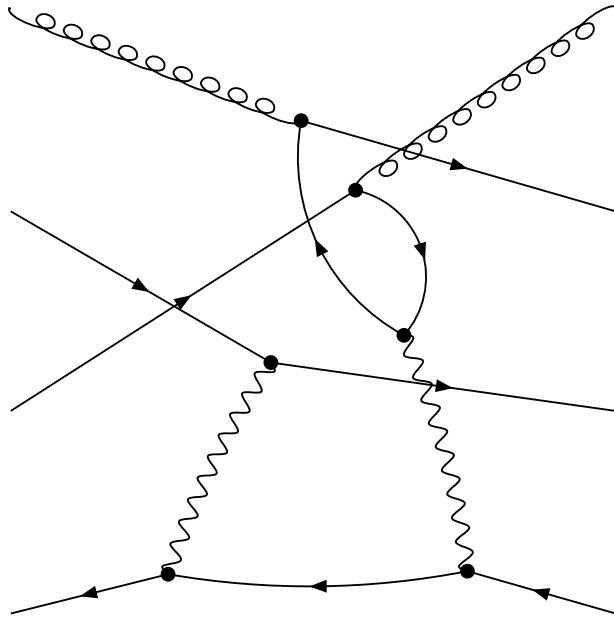
Partial Fractioned Denominator:

0

final

Denominator:

$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p-q-2 \ k[3]]^{-1} \text{prop}[0,p-q-3 \ k[3]]^{-1} \text{prop}[0,p-2 \ q-3 \ k[3]]^{-1}$



$-1+13+15+16$

embedding 16 [1, -1, -1, -2]

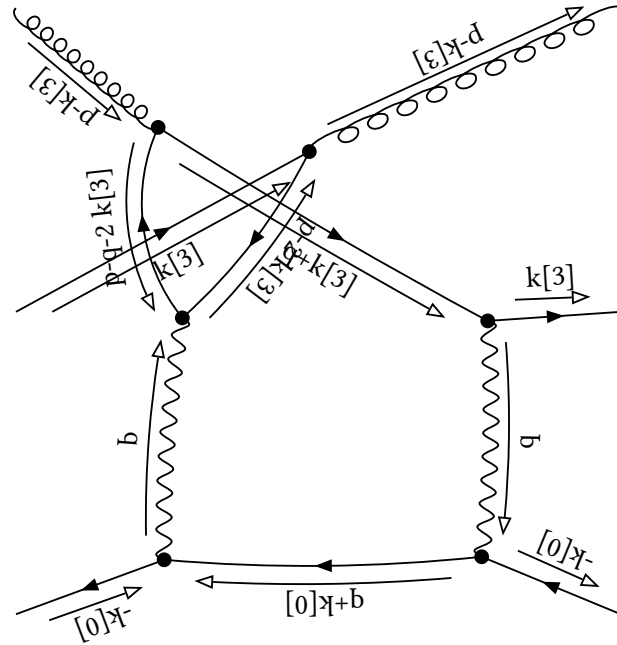
initial

Denominator:

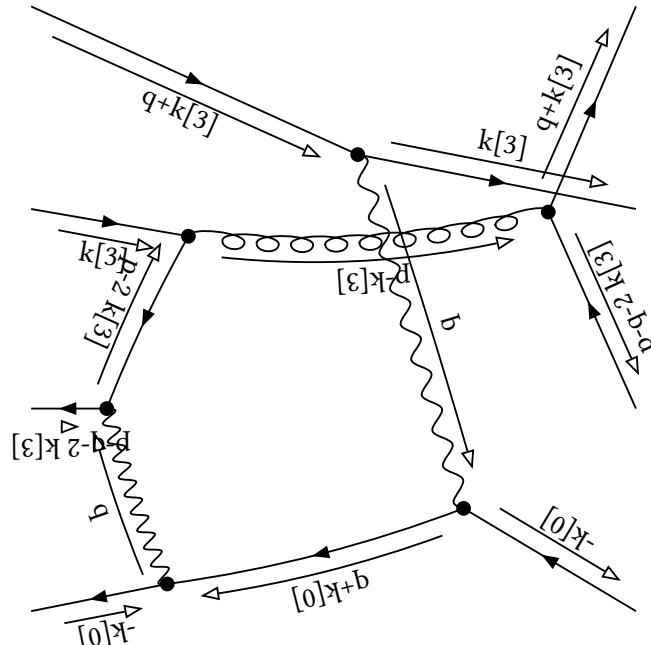
$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, p-k[3]]^{-1} \text{prop}[0, p-2 k[3]]^{-1} \text{prop}[0, p-q-2 k[3]]^{-1}$$

Partial Fractioned Denominator:

$$\begin{aligned} & -1/4 (\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] + \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, p-k[3]]^{-1} \\ & + 1/2 (\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] + \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, p-q-2 k[3]]^{-1} \\ & + 1/2 (\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] + \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, p-k[3]]^{-1} \text{prop}[0, p-q-2 k[3]]^{-1} \\ & + 1/2 (\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] + \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, p-k[3]]^{-1} \text{prop}[0, p-2 k[3]]^{-1} \\ & - (\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] + \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, p-2 k[3]]^{-1} \text{prop}[0, p-q-2 k[3]]^{-1} \\ & - (\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] + \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, p-k[3]]^{-1} \text{prop}[0, p-2 k[3]]^{-1} \text{prop}[0, p-q-2 k[3]]^{-1} \\ & + 1/2 (\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, p-k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & - (\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, p-2 k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & - (\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, p-k[3]]^{-1} \text{prop}[0, p-q-2 k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & + 2 (\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, p-2 k[3]]^{-1} \text{prop}[0, p-q-2 k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & - (\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, p-k[3]]^{-1} \text{prop}[0, p-2 k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & + 2 (\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, p-k[3]]^{-1} \text{prop}[0, p-2 k[3]]^{-1} \text{prop}[0, p-q-2 k[3]]^{-1} \text{dot}[p, p]^{-1} \end{aligned}$$



-3+13+16

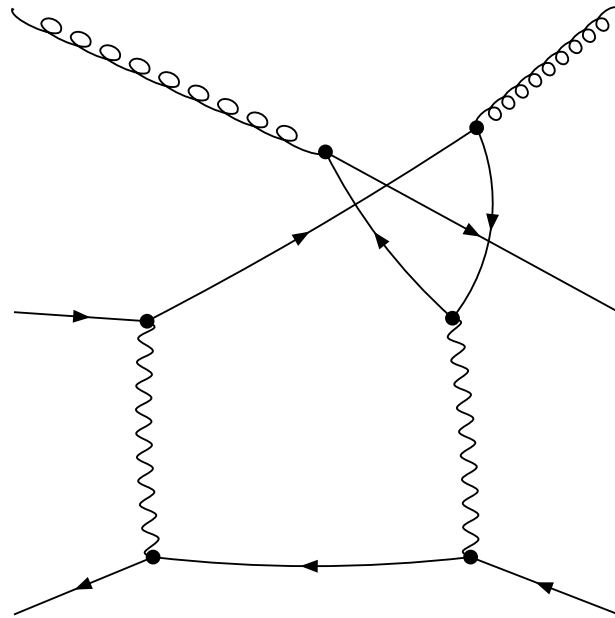


-3+10+13+15

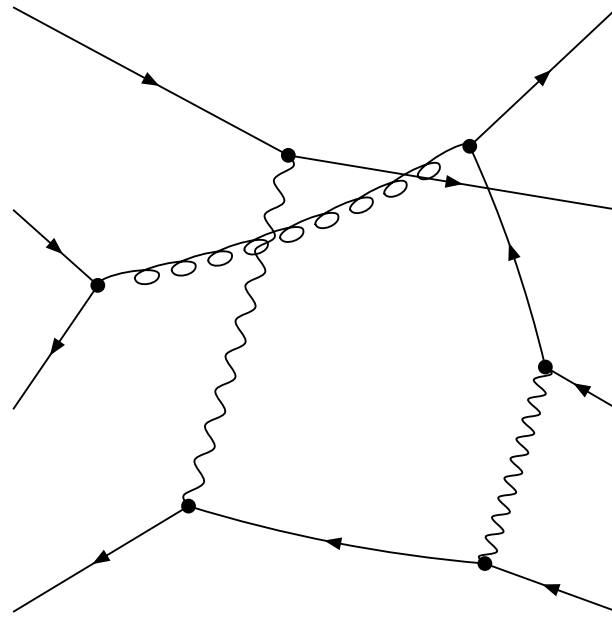
final

Denominator:

$$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p-q-k[3]]^{-1} \text{prop}[0,p-q-2\ k[3]]^{-1} \text{prop}[0,p-2\ q-2\ k[3]]^{-1}$$



$$-1+15+16$$



$$-1+8+13+15$$

embedding 17 [1, -1, -1, -1]

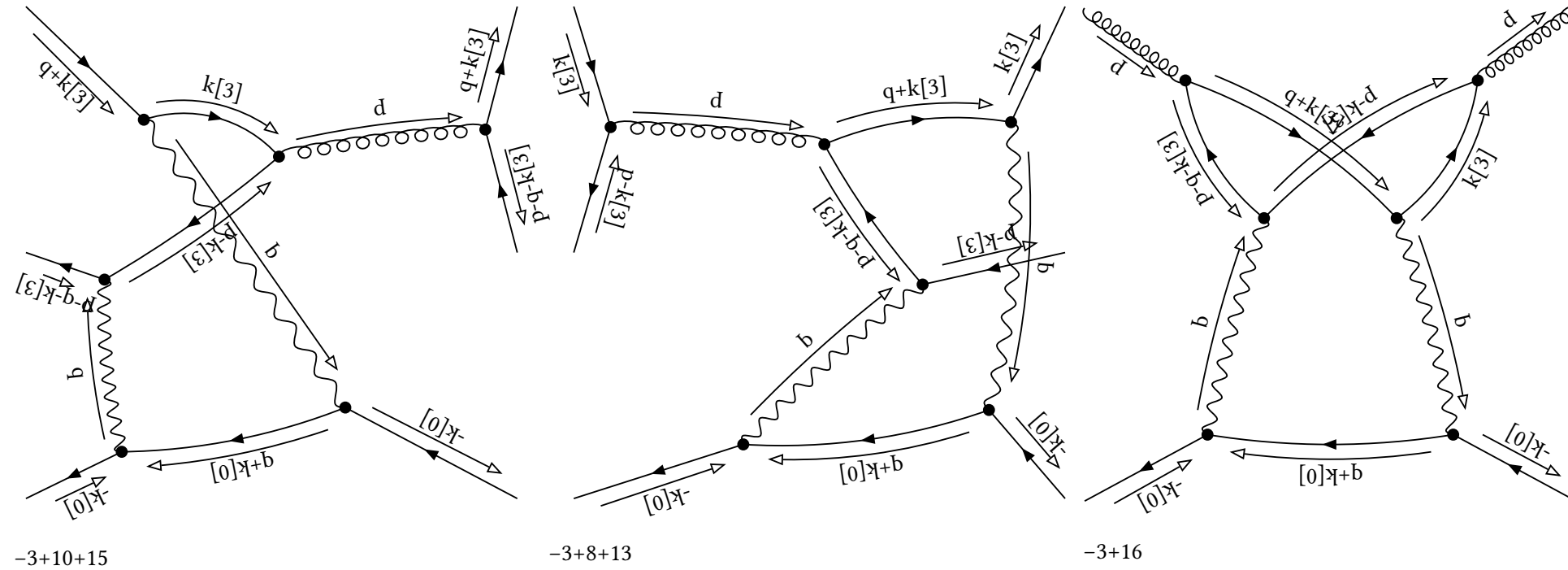
initial

Denominator:

$$\text{prop}[0,p]^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p-k[3]]^{-1} \text{prop}[0,p-q-k[3]]^{-1}$$

Partial Fractioned Denominator:

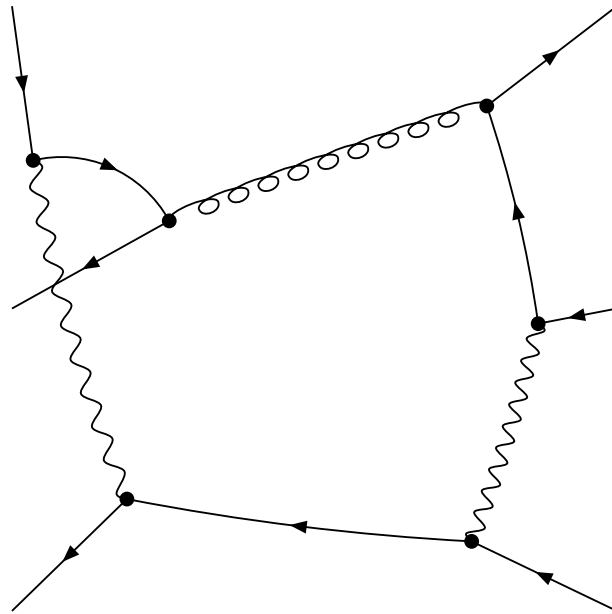
$$\begin{aligned} & -1/2 \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p-k[3]]^{-1} \text{dot}[p,p]^{-1} \text{dot}[p,q]^{-1} \\ & +1/2 \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p-q-k[3]]^{-1} \text{dot}[p,p]^{-1} \text{dot}[p,q]^{-1} \\ & +1/2 \text{prop}[0,k[3]]^{-1} \text{prop}[0,p-k[3]]^{-1} \text{prop}[0,p-q-k[3]]^{-1} \text{dot}[p,p]^{-1} \text{dot}[p,q]^{-1} \\ & -1/2 \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p-k[3]]^{-1} \text{prop}[0,p-q-k[3]]^{-1} \text{dot}[p,p]^{-1} \text{dot}[p,q]^{-1} \end{aligned}$$



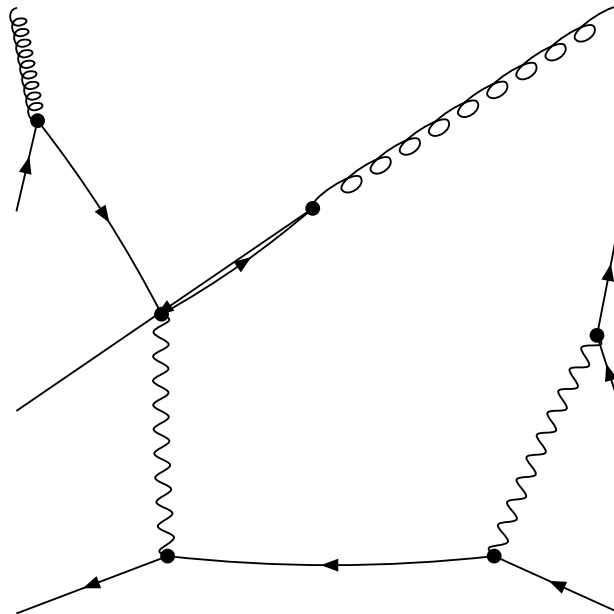
final

Denominator:

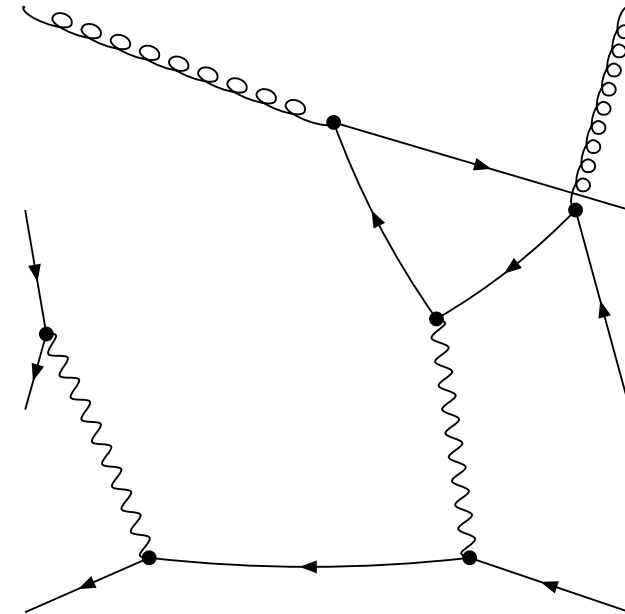
$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p-q]^{-1} \text{prop}[0,p-q-k[3]]^{-1} \text{prop}[0,p-2q-k[3]]^{-1}$



$-1+8+15$



$-1+8-10+16$



$-1-13+15+16$

embedding 18 [1, -1, -1, 0]

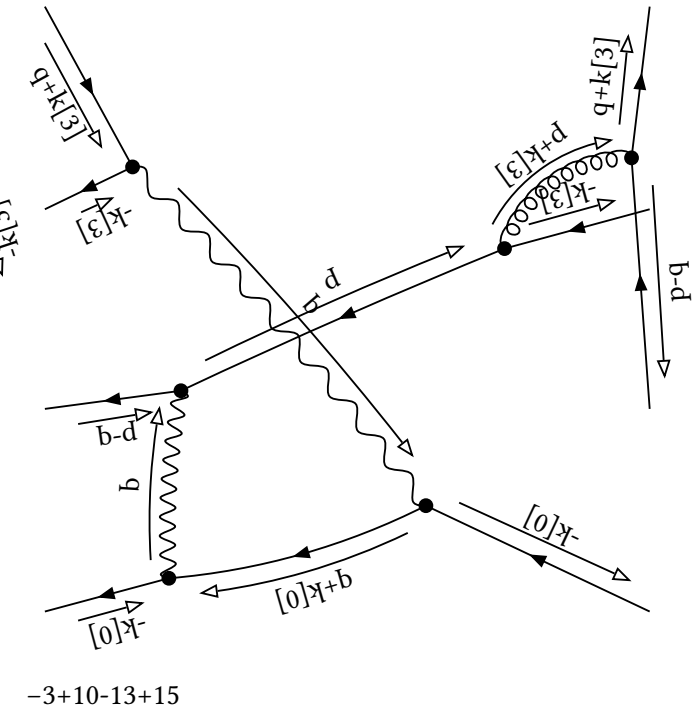
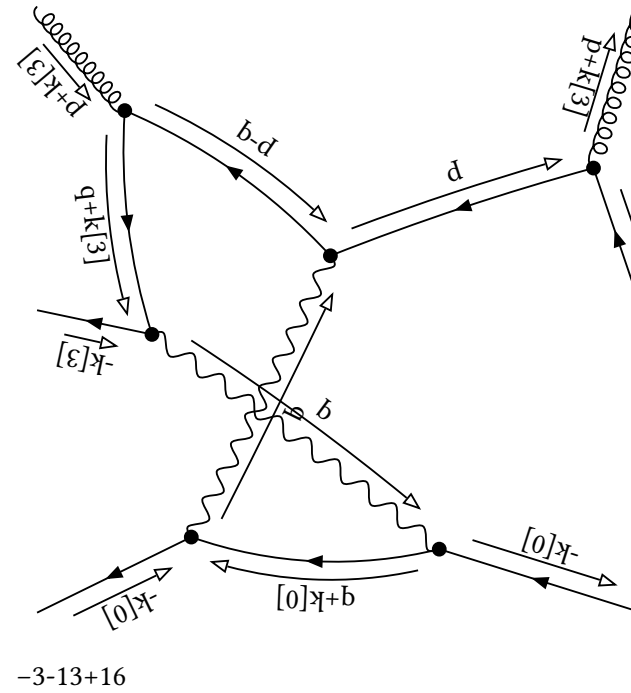
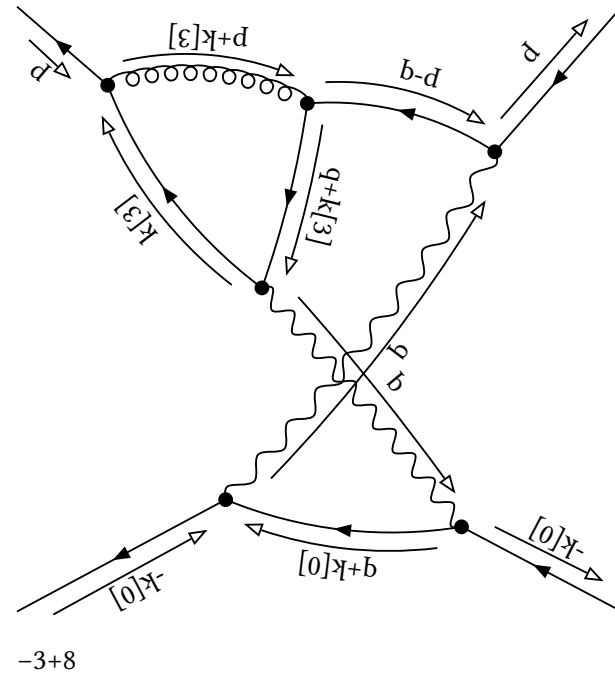
initial

Denominator:

$$\text{prop}[0,p]^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,p+k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p-q]^{-1}$$

Partial Fractioned Denominator:

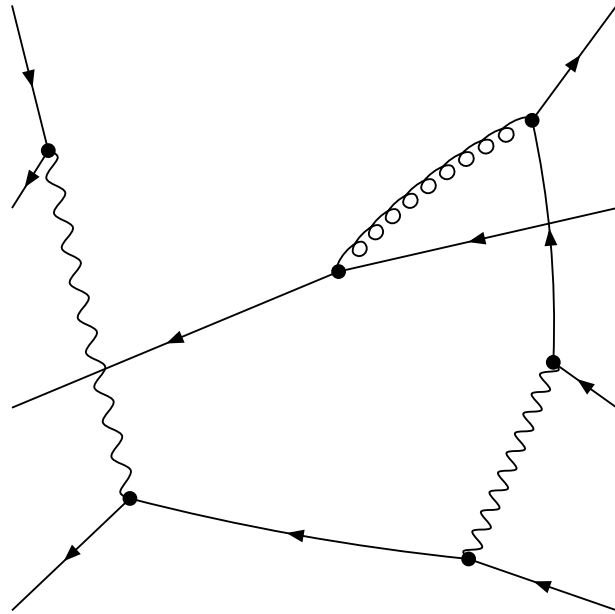
$$(\text{dot}[p,p]-2 \text{dot}[p,q]+\text{dot}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,p+k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{dot}[p,p]^{-1}$$



final

Denominator:

$$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p-q]^{-1} \text{prop}[0,p-2\ q]^{-1} \text{prop}[0,p-q+k[3]]^{-1}$$



$$-1+8-13+15$$

embedding 19 [1, -1, -1, 1]

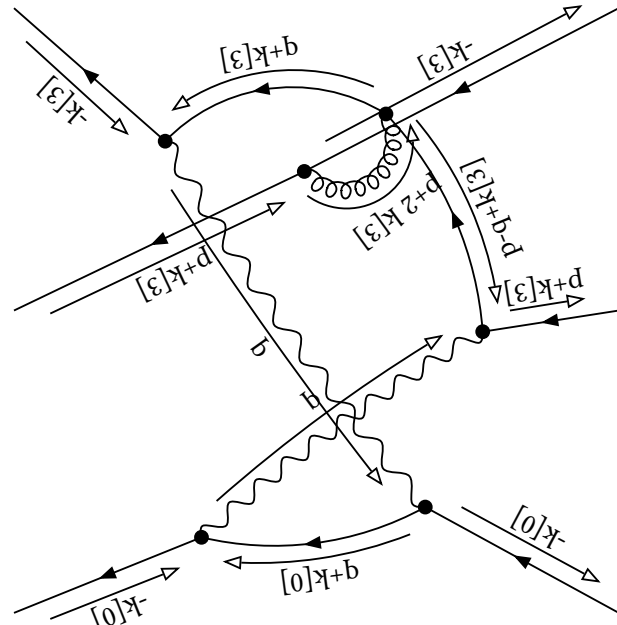
initial

Denominator:

$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, p+k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, p+2 k[3]]^{-1} \text{prop}[0, p-q+k[3]]^{-1}$$

Partial Fractioned Denominator:

$$\begin{aligned} & 2 (-2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} (-\text{dot}[p, p] + 4 \text{dot}[p, q] - 4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, p+2 k[3]]^{-1} \\ & - (-2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} (-\text{dot}[p, p] + 4 \text{dot}[p, q] - 4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, p-q+k[3]]^{-1} \\ & + 2 (-2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} (-\text{dot}[p, p] + 4 \text{dot}[p, q] - 4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, p+2 k[3]]^{-1} \text{prop}[0, p-q+k[3]]^{-1} \\ & + 2 (-2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} (-\text{dot}[p, p] + 4 \text{dot}[p, q] - 4 \text{dot}[q, q])^{-1} \text{prop}[0, p+k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, p+2 k[3]]^{-1} \\ & - (-2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} (-\text{dot}[p, p] + 4 \text{dot}[p, q] - 4 \text{dot}[q, q])^{-1} \text{prop}[0, p+k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, p-q+k[3]]^{-1} \\ & + 2 (-2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} (-\text{dot}[p, p] + 4 \text{dot}[p, q] - 4 \text{dot}[q, q])^{-1} \text{prop}[0, p+k[3]]^{-1} \text{prop}[0, p+2 k[3]]^{-1} \text{prop}[0, p-q+k[3]]^{-1} \\ & - (-2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, p+k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & - (-2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, p+k[3]]^{-1} \text{prop}[0, p-q+k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & + 2 (-2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, p+2 k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & + 2 (-2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, p+2 k[3]]^{-1} \text{prop}[0, p-q+k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & + 2 (-2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} \text{prop}[0, p+k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, p+2 k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & + 2 (-2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} \text{prop}[0, p+k[3]]^{-1} \text{prop}[0, p+2 k[3]]^{-1} \text{prop}[0, p-q+k[3]]^{-1} \text{dot}[p, p]^{-1} \end{aligned}$$



final

Denominator:

0

embedding 20 [1, -1, 0, -2]

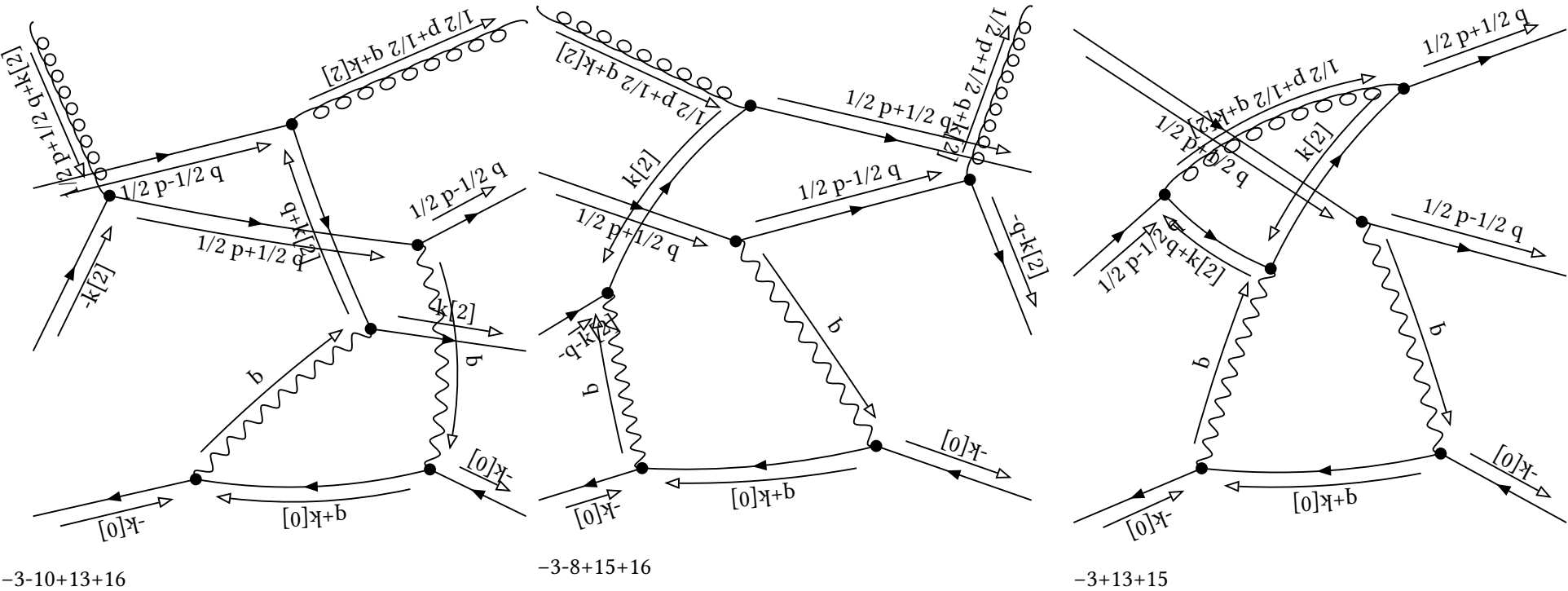
initial

Denominator:

$\text{prop}[0,k[2]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,1/2 p+1/2 q]^{-1} \text{prop}[0,1/2 p-1/2 q]^{-1} \text{prop}[0,1/2 p+1/2 q+k[2]]^{-1}$

Partial Fractioned Denominator:

$(1/4 \text{dot}[p,p]-1/2 \text{dot}[p,q]+1/4 \text{dot}[q,q])^{-1} (1/4 \text{dot}[p,p]+1/2 \text{dot}[p,q]+1/4 \text{dot}[q,q])^{-1} \text{prop}[0,k[2]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,1/2 p+1/2 q+k[2]]^{-1}$



final

Denominator:

0

embedding 21 [1, -1, 0, -1]

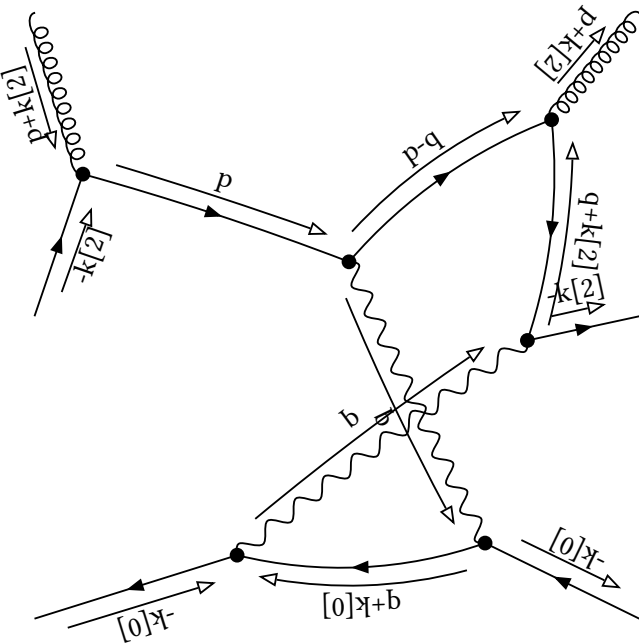
initial

Denominator:

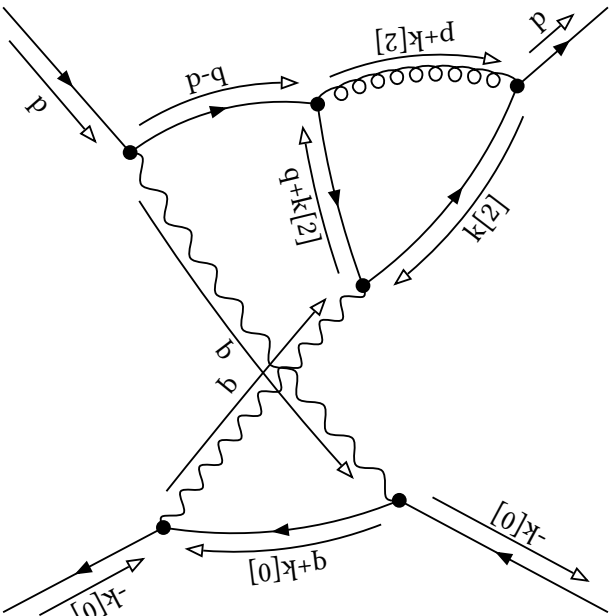
$\text{prop}[0,p]^{-1} \text{prop}[0,k[2]]^{-1} \text{prop}[0,p+k[2]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,p-q]^{-1}$

Partial Fractioned Denominator:

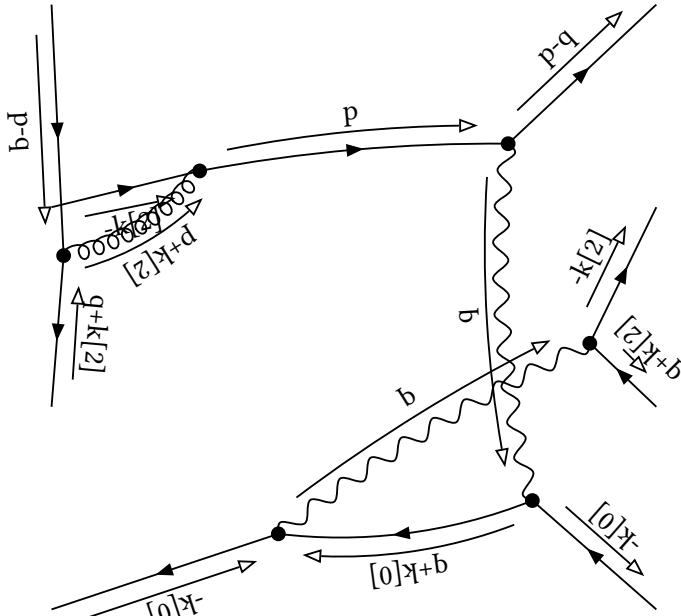
$(\text{dot}[p,p]-2 \text{dot}[p,q]+\text{dot}[q,q])^{-1} \text{prop}[0,k[2]]^{-1} \text{prop}[0,p+k[2]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{dot}[p,p]^{-1}$



-3-10+16



-3+15

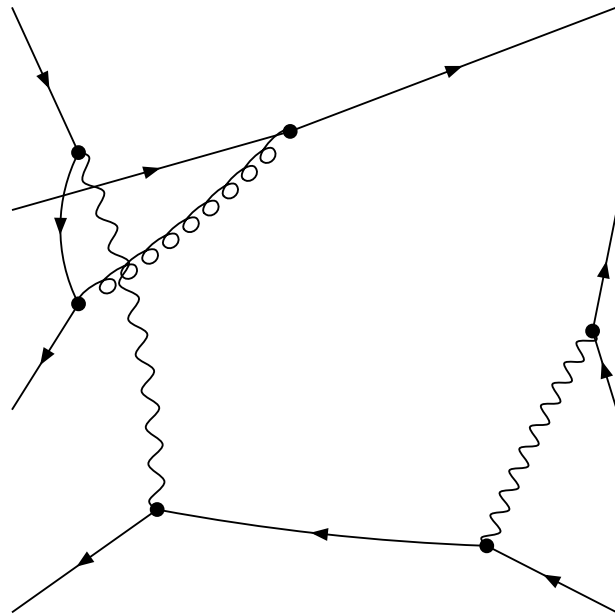


-3+8-10+13

final

Denominator:

$\text{prop}[0,k[2]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,p-q]^{-1} \text{prop}[0,p-2\ q]^{-1} \text{prop}[0,p-q+k[2]]^{-1}$



$-1+8-10+15$

embedding 22 [1, -1, 0, 0]

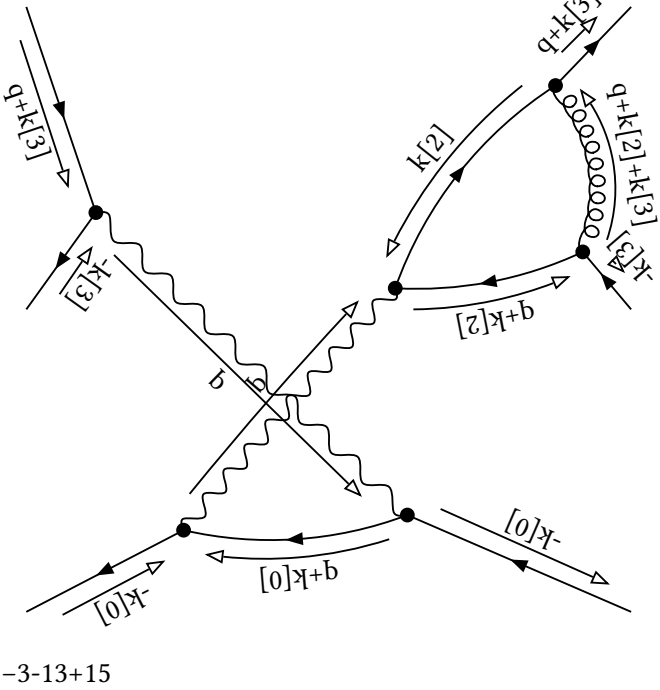
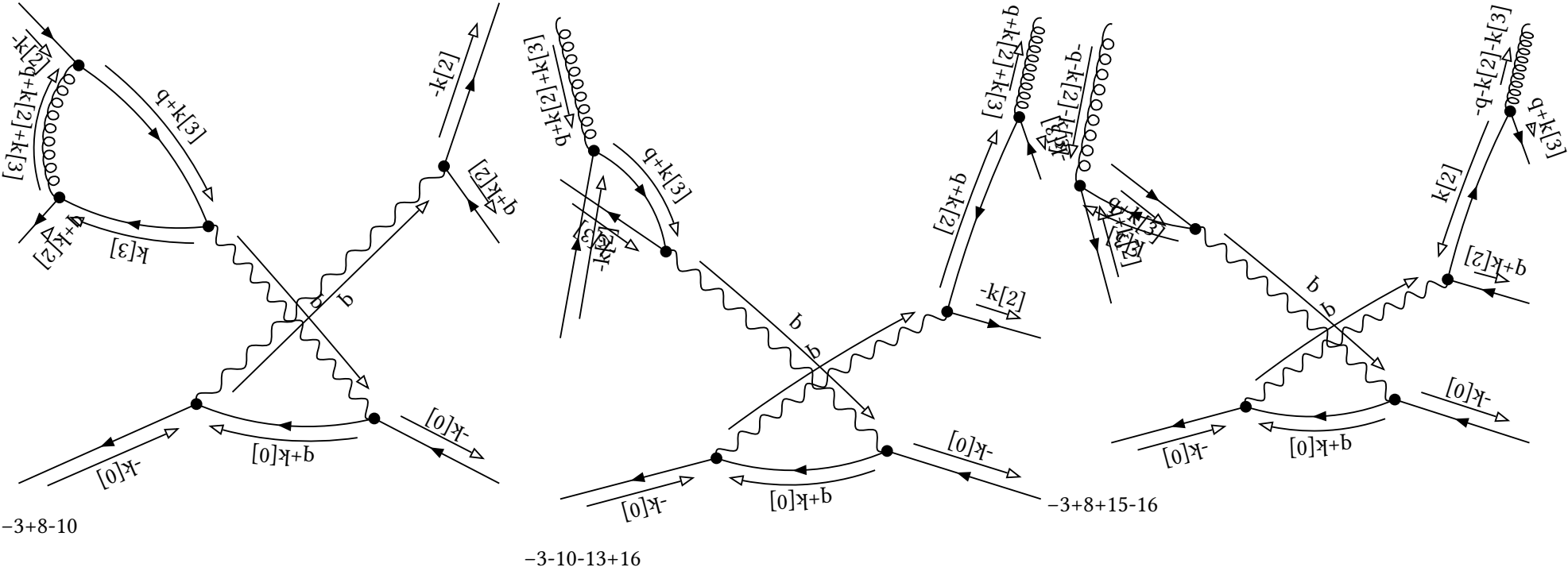
initial

Denominator:

$\text{prop}[0,k[2]]^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,q+k[2]+k[3]]^{-1}$

Partial Fractioned Denominator:

$\text{prop}[0,k[2]]^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,q+k[2]+k[3]]^{-1}$



final

Denominator:

0

embedding 23 [1, -1, 0, 1]

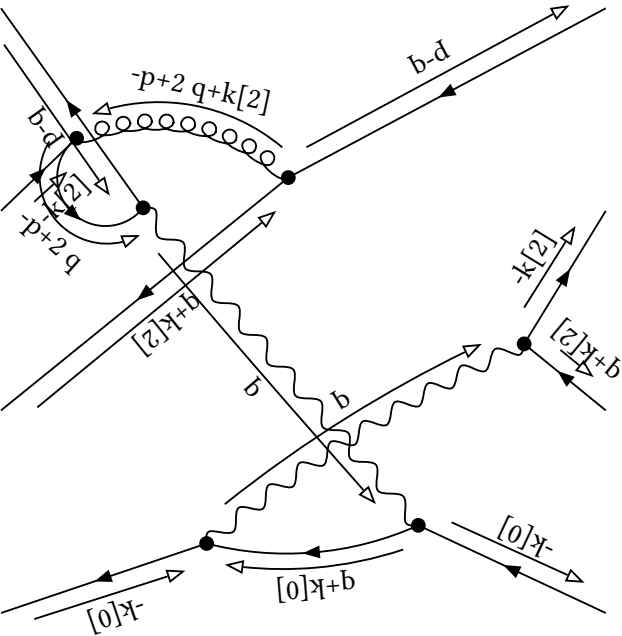
initial

Denominator:

$\text{prop}[0,k[2]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,-p+q]^{-1} \text{prop}[0,-p+2 \ q]^{-1} \text{prop}[0,-p+2 \ q+k[2]]^{-1}$

Partial Fractioned Denominator:

$(\text{dot}[p,p]-4 \ \text{dot}[p,q]+4 \ \text{dot}[q,q])^{-1} (\text{dot}[p,p]-2 \ \text{dot}[p,q]+\text{dot}[q,q])^{-1} \text{prop}[0,k[2]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,-p+2 \ q+k[2]]^{-1}$



final

Denominator:

0

embedding 24 [1, -1, 1, -2]

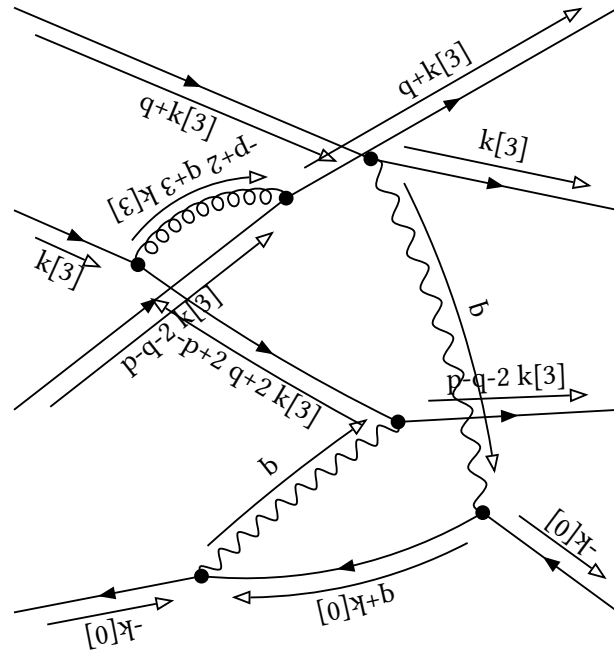
initial

Denominator:

$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+q+2 \ k[3]]^{-1} \text{prop}[0, -p+2 \ q+2 \ k[3]]^{-1} \text{prop}[0, -p+2 \ q+3 \ k[3]]^{-1}$$

Partial Fractioned Denominator:

$$\begin{aligned} & -1/2 (\text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+q+2 \ k[3]]^{-1} \\ & +3/4 (\text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+2 \ q+3 \ k[3]]^{-1} \\ & +3/2 (\text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -p+q+2 \ k[3]]^{-1} \text{prop}[0, -p+2 \ q+3 \ k[3]]^{-1} \\ & - (\text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+q+2 \ k[3]]^{-1} \text{prop}[0, -p+2 \ q+2 \ k[3]]^{-1} \\ & +3/2 (\text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+2 \ q+2 \ k[3]]^{-1} \text{prop}[0, -p+2 \ q+3 \ k[3]]^{-1} \\ & +3 (\text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, -p+q+2 \ k[3]]^{-1} \text{prop}[0, -p+2 \ q+2 \ k[3]]^{-1} \text{prop}[0, -p+2 \ q+3 \ k[3]]^{-1} \\ & +1/2 (\text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+2 \ q+2 \ k[3]]^{-1} \\ & -3/4 (\text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+2 \ q+3 \ k[3]]^{-1} \\ & + (\text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -p+q+2 \ k[3]]^{-1} \text{prop}[0, -p+2 \ q+2 \ k[3]]^{-1} \\ & -3/2 (\text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -p+q+2 \ k[3]]^{-1} \text{prop}[0, -p+2 \ q+3 \ k[3]]^{-1} \\ & -3/2 (\text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+2 \ q+2 \ k[3]]^{-1} \text{prop}[0, -p+2 \ q+3 \ k[3]]^{-1} \\ & -3 (\text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, -p+q+2 \ k[3]]^{-1} \text{prop}[0, -p+2 \ q+2 \ k[3]]^{-1} \text{prop}[0, -p+2 \ q+3 \ k[3]]^{-1} \end{aligned}$$



$$-3-10+13+15$$

final

Denominator:

0

embedding 25 [1, -1, 1, -1]

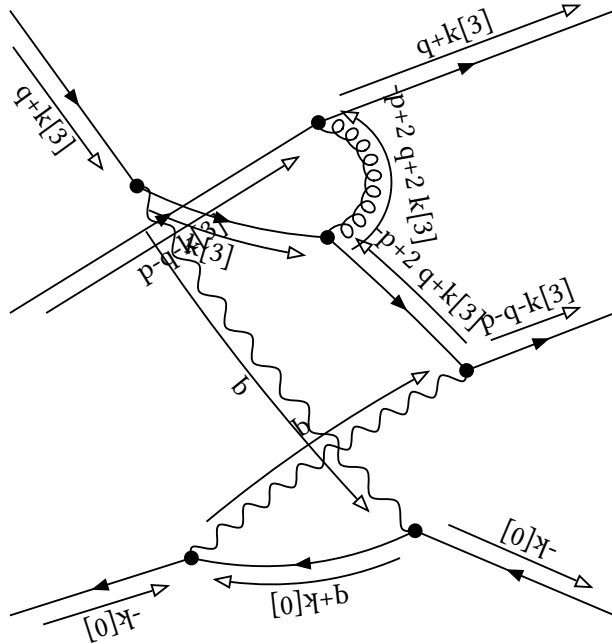
initial

Denominator:

$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+q+k[3]]^{-1} \text{prop}[0, -p+2 \ q+k[3]]^{-1} \text{prop}[0, -p+2 \ q+2 \ k[3]]^{-1}$$

Partial Fractioned Denominator:

$$\begin{aligned} & (2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} (-\text{dot}[p, p] + 4 \text{dot}[p, q] - 4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+2 \ q+k[3]]^{-1} \\ & - 2 (2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} (-\text{dot}[p, p] + 4 \text{dot}[p, q] - 4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+2 \ q+2 \ k[3]]^{-1} \\ & + (2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} (-\text{dot}[p, p] + 4 \text{dot}[p, q] - 4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -p+q+k[3]]^{-1} \text{prop}[0, -p+2 \ q+k[3]]^{-1} \\ & - 2 (2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} (-\text{dot}[p, p] + 4 \text{dot}[p, q] - 4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -p+q+k[3]]^{-1} \text{prop}[0, -p+2 \ q+2 \ k[3]]^{-1} \\ & - 2 (2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} (-\text{dot}[p, p] + 4 \text{dot}[p, q] - 4 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+2 \ q+k[3]]^{-1} \text{prop}[0, -p+2 \ q+2 \ k[3]]^{-1} \\ & - 2 (2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} (-\text{dot}[p, p] + 4 \text{dot}[p, q] - 4 \text{dot}[q, q])^{-1} \text{prop}[0, -p+q+k[3]]^{-1} \text{prop}[0, -p+2 \ q+k[3]]^{-1} \text{prop}[0, -p+2 \ q+2 \ k[3]]^{-1} \\ & + (2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+q+k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & - 2 (2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+2 \ q+2 \ k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & - 2 (2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -p+q+k[3]]^{-1} \text{prop}[0, -p+2 \ q+2 \ k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & + (2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+q+k[3]]^{-1} \text{prop}[0, -p+2 \ q+k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & - 2 (2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+2 \ q+k[3]]^{-1} \text{prop}[0, -p+2 \ q+2 \ k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & - 2 (2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, -p+q+k[3]]^{-1} \text{prop}[0, -p+2 \ q+k[3]]^{-1} \text{prop}[0, -p+2 \ q+2 \ k[3]]^{-1} \text{dot}[p, p]^{-1} \end{aligned}$$



final

Denominator:

0

embedding 26 [1, -1, 1, 0]

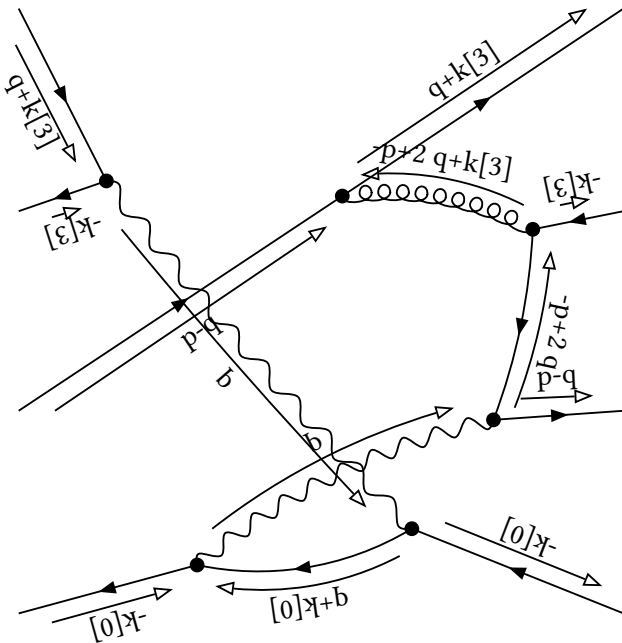
initial

Denominator:

$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-p+q]^{-1} \text{prop}[0,-p+2 \ q]^{-1} \text{prop}[0,-p+2 \ q+k[3]]^{-1}$

Partial Fractioned Denominator:

$(\text{dot}[p,p]-4 \ \text{dot}[p,q]+4 \ \text{dot}[q,q])^{-1} (\text{dot}[p,p]-2 \ \text{dot}[p,q]+\text{dot}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-p+2 \ q+k[3]]^{-1}$



final

Denominator:

0

embedding 27 [1, 0, -2, -2]

initial

Denominator:

0

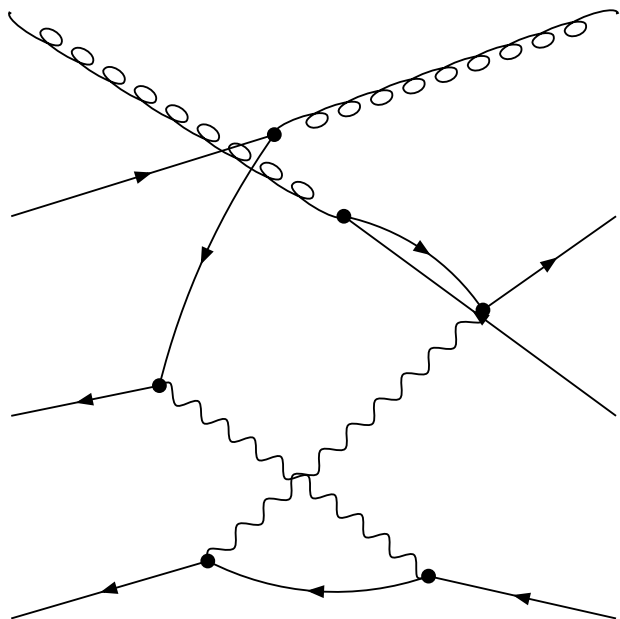
Partial Fractioned Denominator:

0

final

Denominator:

$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,1/2 \ p+1/2 \ q]^{-1} \text{prop}[0,1/2 \ p+1/2 \ q-k[3]]^{-1} \text{prop}[0,1/2 \ p-1/2 \ q-k[3]]^{-1}$



$-1+10+13+16$

embedding 28 [1, 0, -2, -1]

initial

Denominator:

0

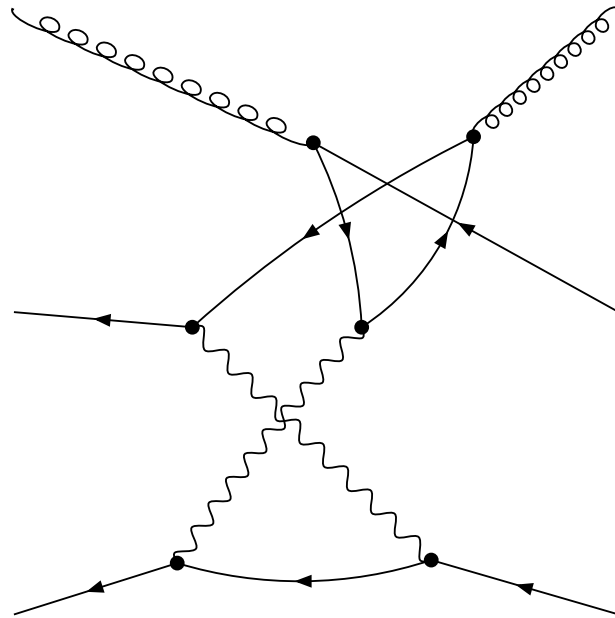
Partial Fractioned Denominator:

0

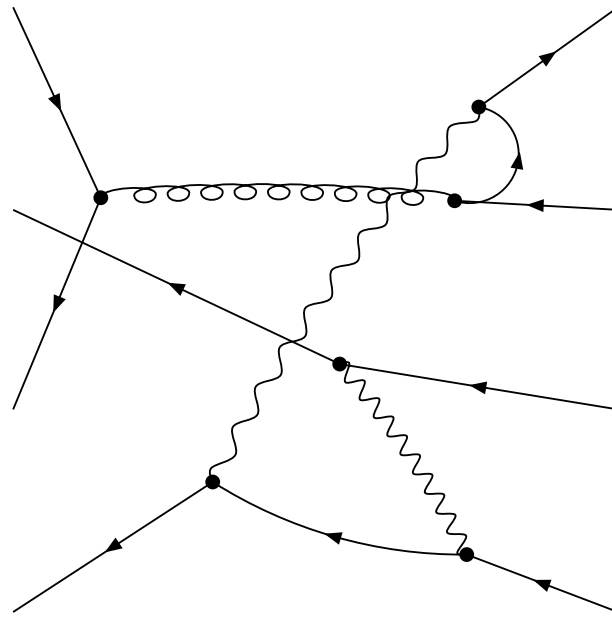
final

Denominator:

$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,1/2 \ p+1/2 \ q+1/2 \ k[3]]^{-1} \text{prop}[0,1/2 \ p+1/2 \ q-1/2 \ k[3]]^{-1} \text{prop}[0,1/2 \ p-1/2 \ q-1/2 \ k[3]]^{-1}$



$-1+10+16$



$-1+8+10+13$

embedding 29 [1, 0, -2, 0]

initial

Denominator:

0

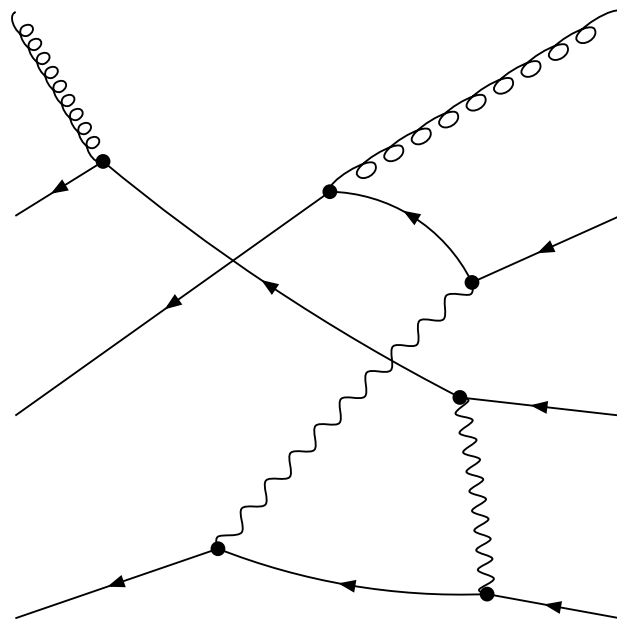
Partial Fractioned Denominator:

0

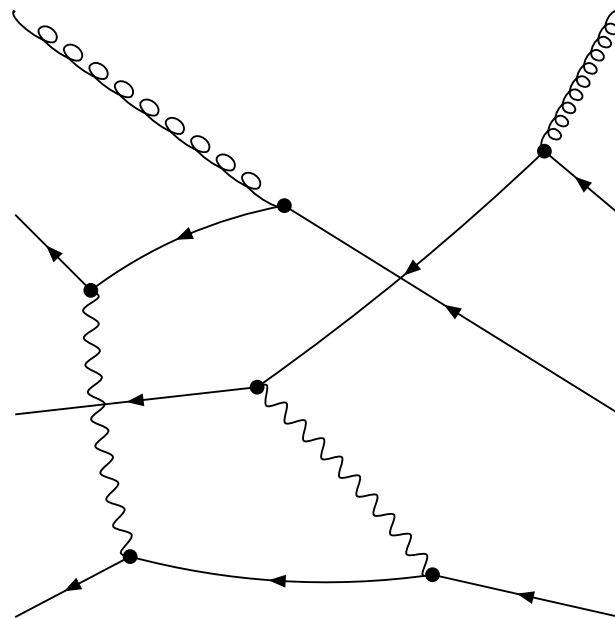
final

Denominator:

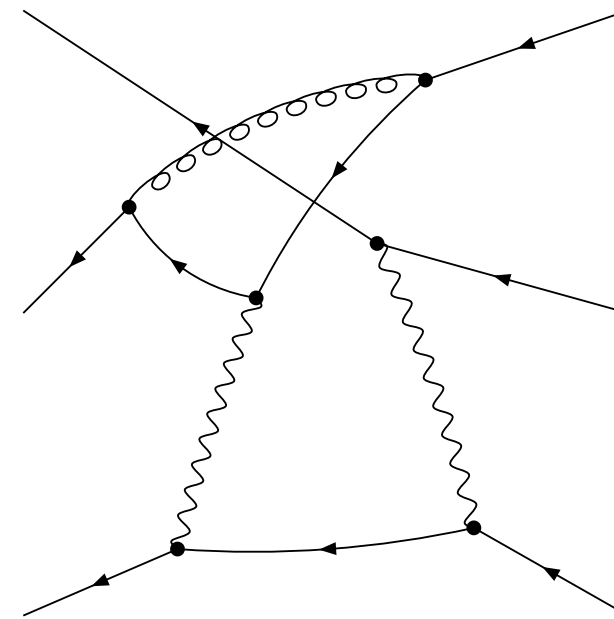
$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,1/2 \ p+1/2 \ q]^{-1} \text{prop}[0,1/2 \ p-1/2 \ q]^{-1} \text{prop}[0,1/2 \ p+1/2 \ q+k[3]]^{-1}$



$-1+8-15+16$



$-1+10-13+16$



$-1+8+10$

embedding 30 [1, 0, -2, 1]

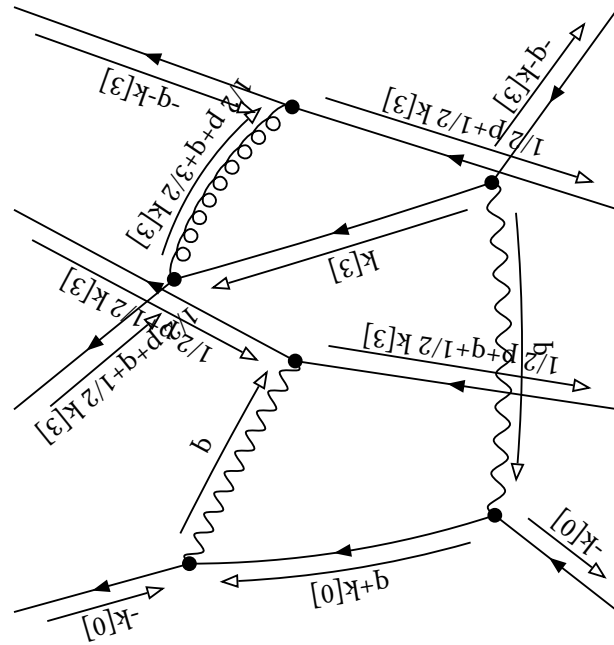
initial

Denominator:

$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 k[3]]^{-1} \text{prop}[0, 1/2 p+q+1/2 k[3]]^{-1} \text{prop}[0, 1/2 p+q+3/2 k[3]]^{-1}$$

Partial Fractioned Denominator:

$$\begin{aligned} & 2 (-2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p+q+1/2 k[3]]^{-1} \\ & -6 (-2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p+q+3/2 k[3]]^{-1} \\ & + (-2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 k[3]]^{-1} \text{prop}[0, 1/2 p+q+1/2 k[3]]^{-1} \\ & -3 (-2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 k[3]]^{-1} \text{prop}[0, 1/2 p+q+3/2 k[3]]^{-1} \\ & -3 (-2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p+q+1/2 k[3]]^{-1} \text{prop}[0, 1/2 p+q+3/2 k[3]]^{-1} \\ & k[3]]^{-1} \\ & -3/2 (-2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, 1/2 p+1/2 k[3]]^{-1} \text{prop}[0, 1/2 p+q+1/2 k[3]]^{-1} \text{prop}[0, 1/2 p+q+3/2 k[3]]^{-1} \\ & -2 (-2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 k[3]]^{-1} \\ & +6 (-2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p+q+3/2 k[3]]^{-1} \\ & +3 (-2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 k[3]]^{-1} \text{prop}[0, 1/2 p+q+3/2 k[3]]^{-1} \\ & - (-2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 k[3]]^{-1} \text{prop}[0, 1/2 p+q+1/2 k[3]]^{-1} \\ & +3 (-2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p+q+1/2 k[3]]^{-1} \text{prop}[0, 1/2 p+q+3/2 k[3]]^{-1} \\ & k[3]]^{-1} \\ & +3/2 (-2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, 1/2 p+1/2 k[3]]^{-1} \text{prop}[0, 1/2 p+q+1/2 k[3]]^{-1} \text{prop}[0, 1/2 p+q+3/2 k[3]]^{-1} \end{aligned}$$

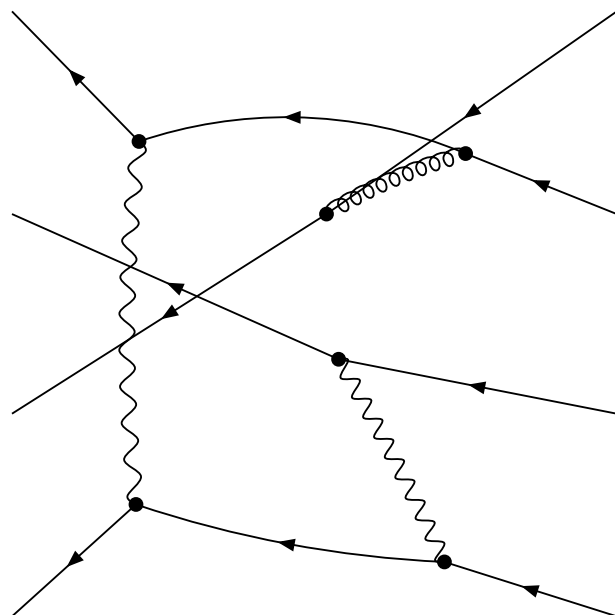


-3+8+10-15

final

Denominator:

$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,1/2 \ p+1/2 \ q+1/2 \ k[3]]^{-1} \text{prop}[0,1/2 \ p+1/2 \ q+3/2 \ k[3]]^{-1} \text{prop}[0,1/2 \ p-1/2 \ q+1/2 \ k[3]]^{-1}$



-1+8+10-13

embedding 31 [1, 0, -1, -2]

initial

Denominator:

0

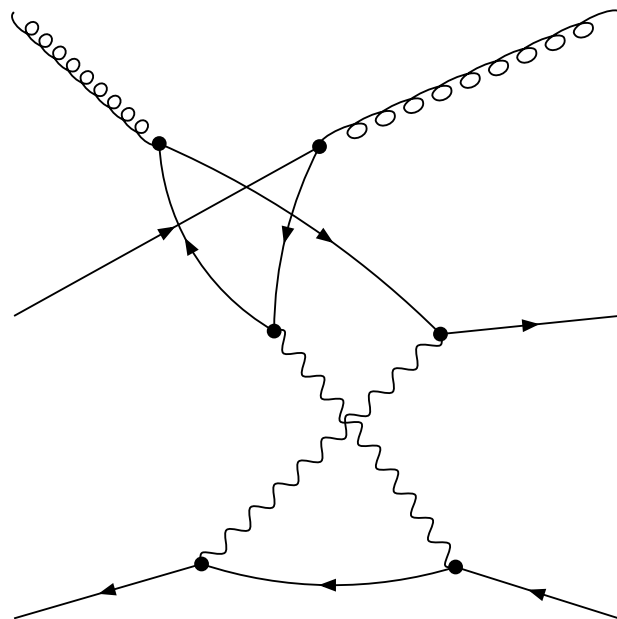
Partial Fractioned Denominator:

0

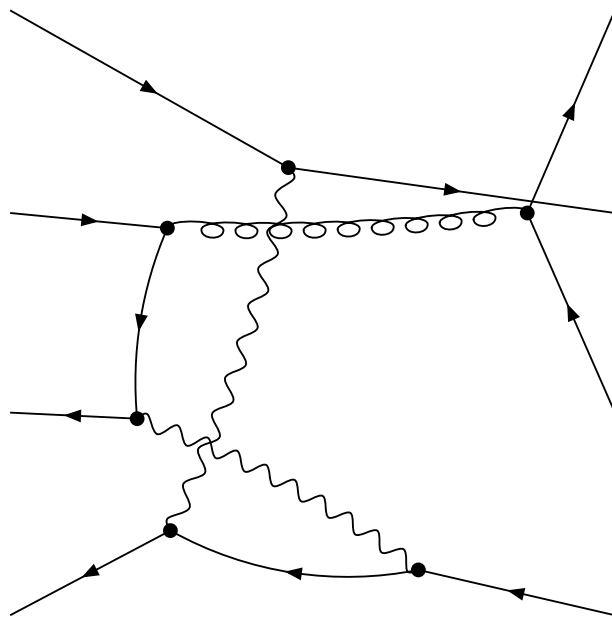
final

Denominator:

$$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p-k[3]]^{-1} \text{prop}[0,p-2 \ k[3]]^{-1} \text{prop}[0,p-q-2 \ k[3]]^{-1}$$



$$-1+13+16$$



$$-1+10+13+15$$

embedding 32 [1, 0, -1, -1]

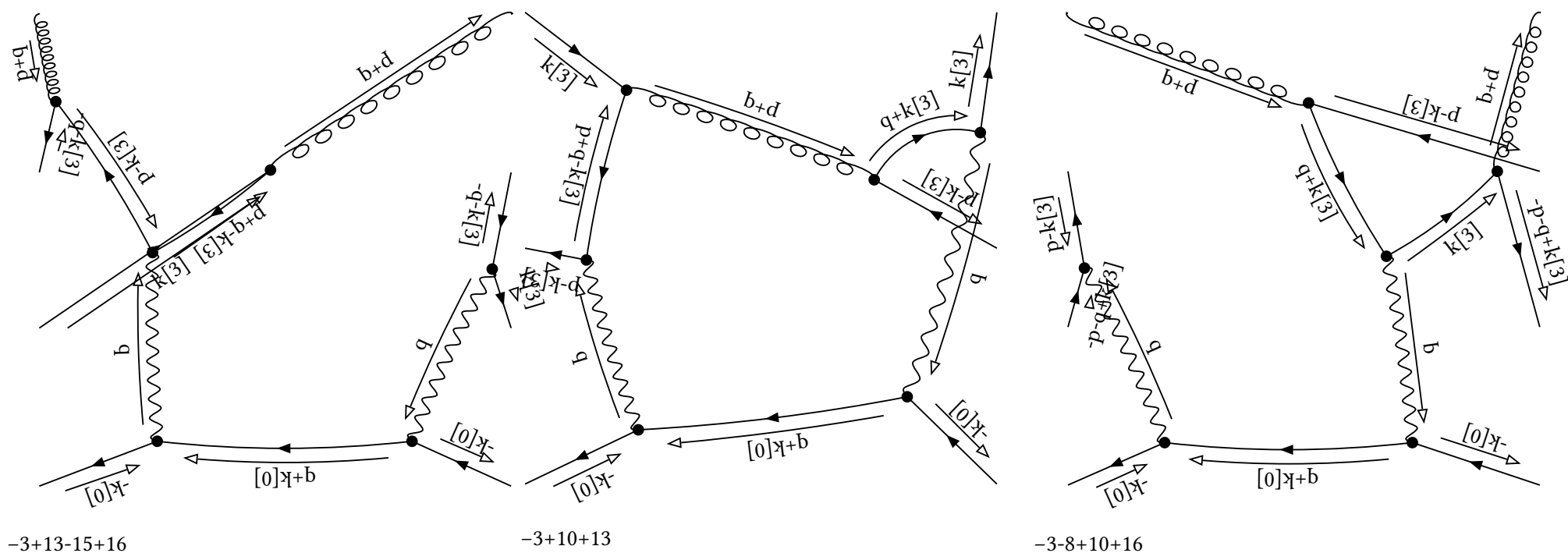
initial

Denominator:

$$\text{prop}[0,k[3]]^{-1} \text{prop}[0,p+q]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p-k[3]]^{-1} \text{prop}[0,p+q-k[3]]^{-1}$$

Partial Fractioned Denominator:

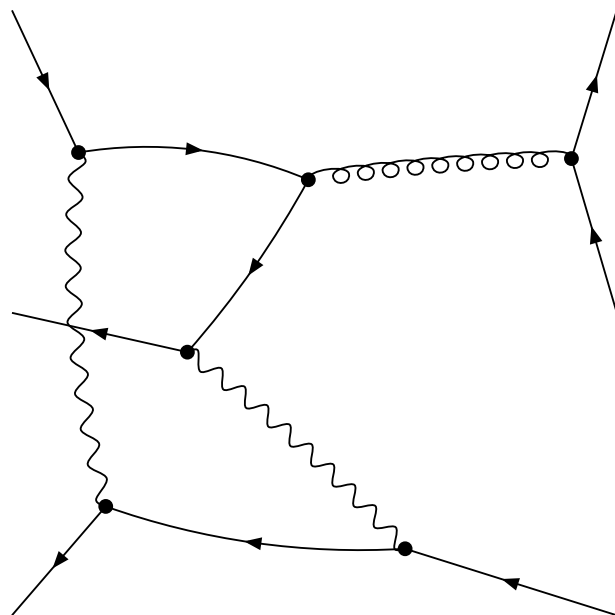
$$\begin{aligned} & (2 \operatorname{dot}[p,q]+2 \operatorname{dot}[q,q])^{-1} (\operatorname{dot}[p,p]+2 \operatorname{dot}[p,q]+\operatorname{dot}[q,q])^{-1} \operatorname{prop}[0,k[3]]^{-1} \operatorname{prop}[0,q+k[3]]^{-1} \operatorname{prop}[0,p-k[3]]^{-1} \\ & - (2 \operatorname{dot}[p,q]+2 \operatorname{dot}[q,q])^{-1} (\operatorname{dot}[p,p]+2 \operatorname{dot}[p,q]+\operatorname{dot}[q,q])^{-1} \operatorname{prop}[0,k[3]]^{-1} \operatorname{prop}[0,q+k[3]]^{-1} \operatorname{prop}[0,p+q-k[3]]^{-1} \\ & + (2 \operatorname{dot}[p,q]+2 \operatorname{dot}[q,q])^{-1} (\operatorname{dot}[p,p]+2 \operatorname{dot}[p,q]+\operatorname{dot}[q,q])^{-1} \operatorname{prop}[0,k[3]]^{-1} \operatorname{prop}[0,p-k[3]]^{-1} \operatorname{prop}[0,p+q-k[3]]^{-1} \\ & - (2 \operatorname{dot}[p,q]+2 \operatorname{dot}[q,q])^{-1} (\operatorname{dot}[p,p]+2 \operatorname{dot}[p,q]+\operatorname{dot}[q,q])^{-1} \operatorname{prop}[0,q+k[3]]^{-1} \operatorname{prop}[0,p-k[3]]^{-1} \operatorname{prop}[0,p+q-k[3]]^{-1} \end{aligned}$$



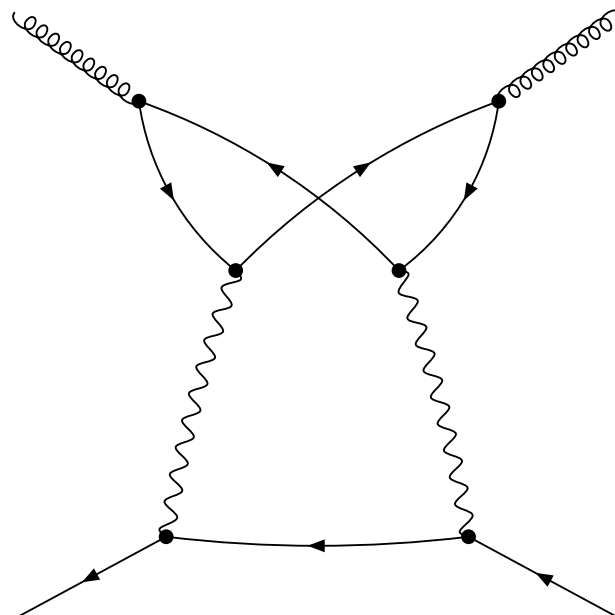
final

Denominator:

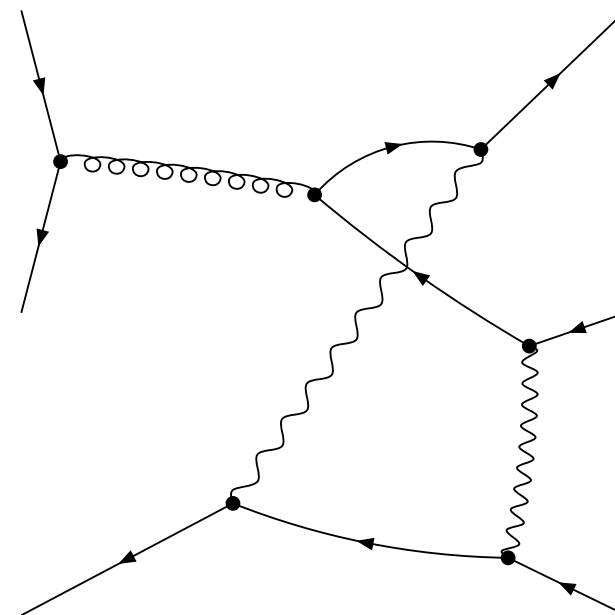
$\text{prop}[0,p]^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p-k[3]]^{-1} \text{prop}[0,p-q-k[3]]^{-1}$



-1+10+15



-1+16



-1+8+13

embedding 33 [1, 0, -1, 0]

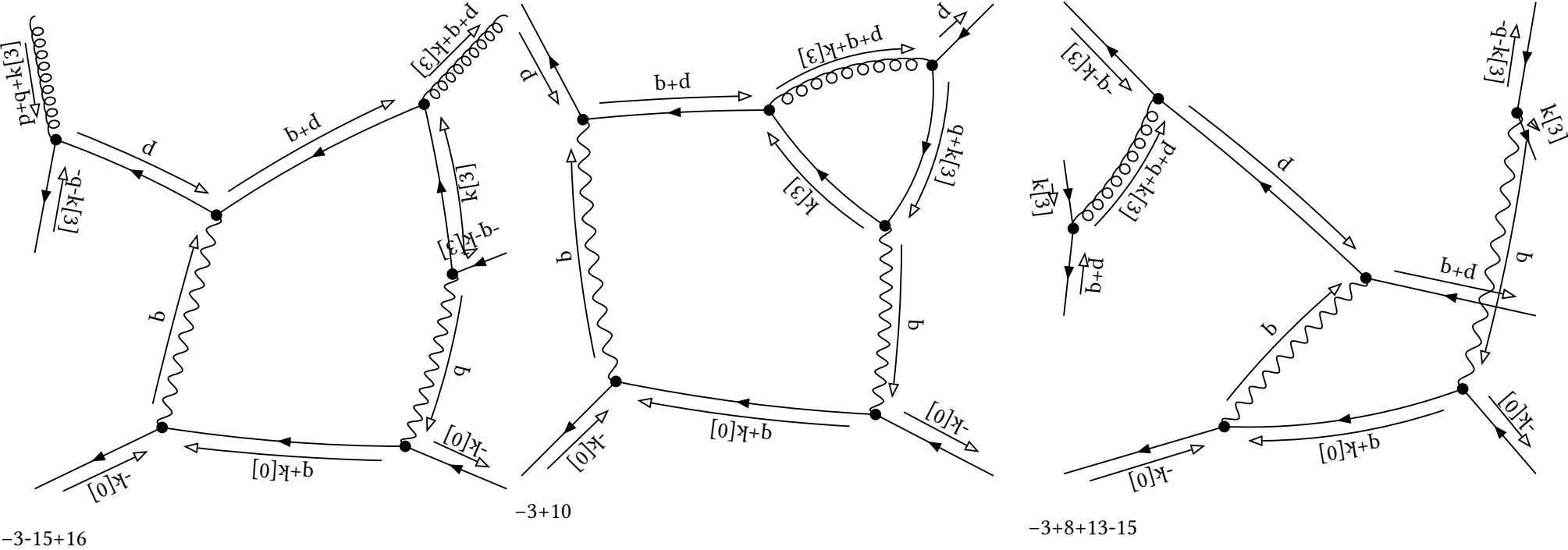
initial

Denominator:

$\text{prop}[0,p]^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,p+q]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+q+k[3]]^{-1}$

Partial Fractioned Denominator:

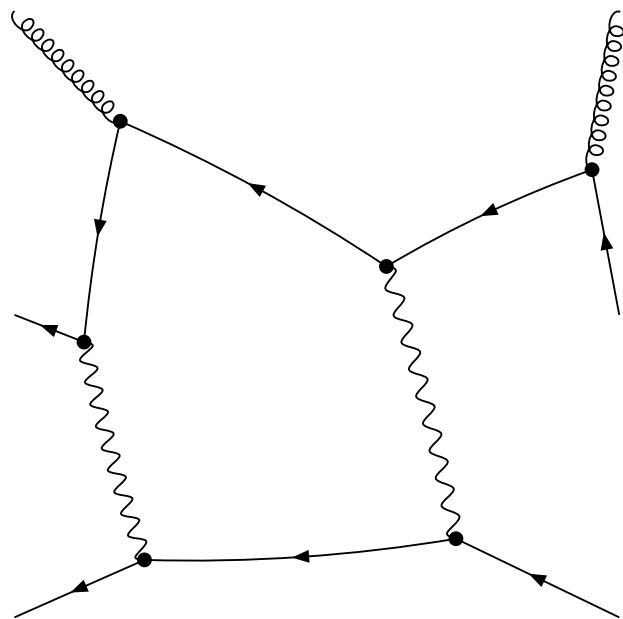
$(\text{dot}[p,p]+2 \text{dot}[p,q]+\text{dot}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+q+k[3]]^{-1} \text{dot}[p,p]^{-1}$



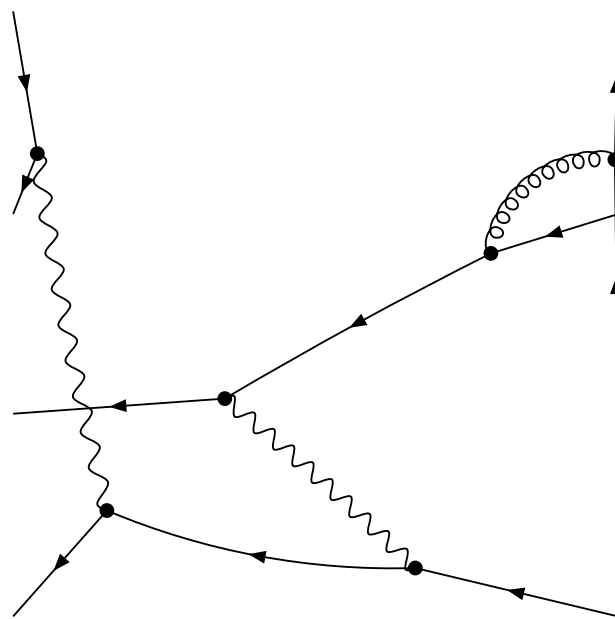
final

Denominator:

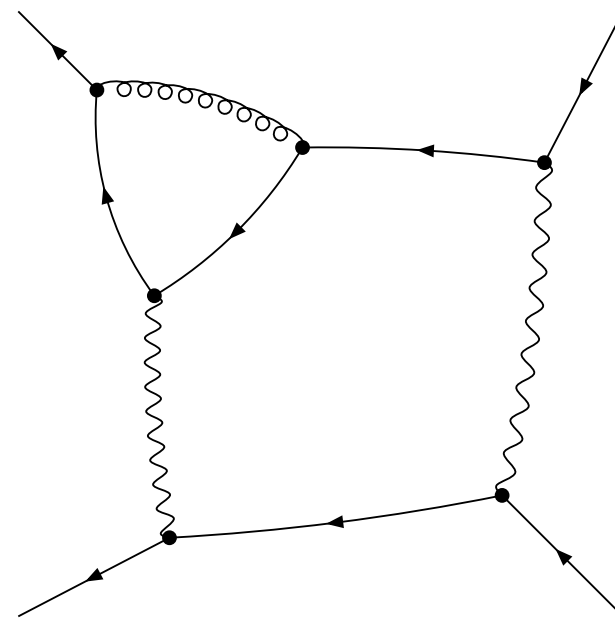
$\text{prop}[0,p]^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,p+k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p-q]^{-1}$



-1-13+16



-1+10-13+15



-1+8

embedding 34 [1, 0, -1, 1]

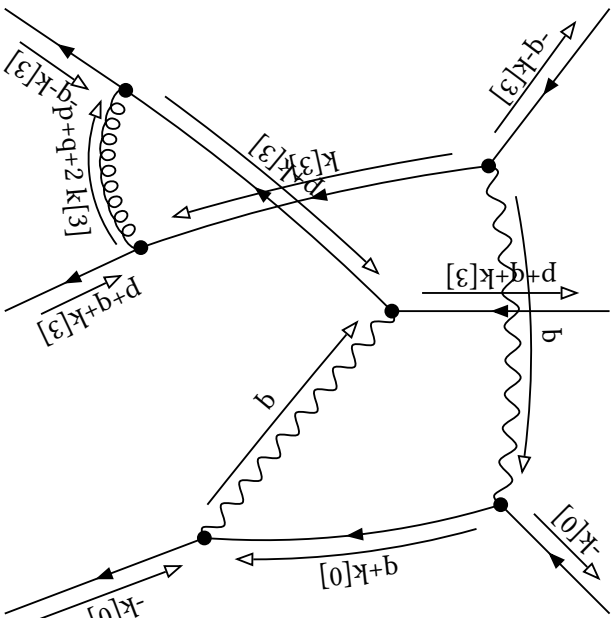
initial

Denominator:

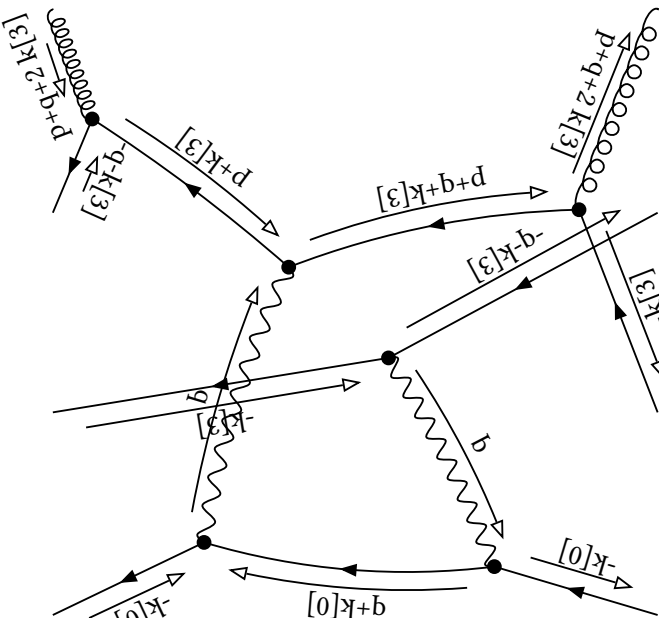
$\text{prop}[\theta, k[3]]^{-1} \text{prop}[\theta, p+k[3]]^{-1} \text{prop}[\theta, q+k[3]]^{-1} \text{prop}[\theta, p+q+k[3]]^{-1} \text{prop}[\theta, p+q+2 \ k[3]]^{-1}$

Partial Fractioned Denominator:

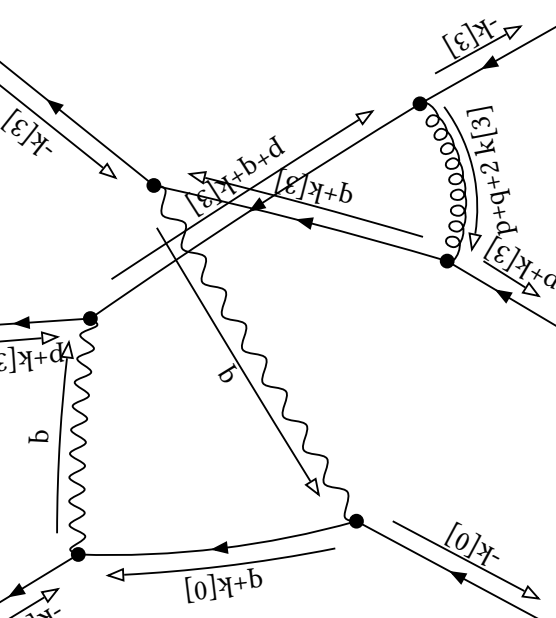
$$\begin{aligned} & -1/2 \ (-\text{dot}[p,p]-2 \ \text{dot}[p,q]-\text{dot}[q,q])^{-1} \ \text{prop}[\theta, k[3]]^{-1} \ \text{prop}[\theta, p+k[3]]^{-1} \ \text{prop}[\theta, p+q+k[3]]^{-1} \ \text{dot}[p,q]^{-1} \\ & +(-\text{dot}[p,p]-2 \ \text{dot}[p,q]-\text{dot}[q,q])^{-1} \ \text{prop}[\theta, k[3]]^{-1} \ \text{prop}[\theta, p+k[3]]^{-1} \ \text{prop}[\theta, p+q+2 \ k[3]]^{-1} \ \text{dot}[p,q]^{-1} \\ & -1/2 \ (-\text{dot}[p,p]-2 \ \text{dot}[p,q]-\text{dot}[q,q])^{-1} \ \text{prop}[\theta, k[3]]^{-1} \ \text{prop}[\theta, q+k[3]]^{-1} \ \text{prop}[\theta, p+q+k[3]]^{-1} \ \text{dot}[p,q]^{-1} \\ & +(-\text{dot}[p,p]-2 \ \text{dot}[p,q]-\text{dot}[q,q])^{-1} \ \text{prop}[\theta, k[3]]^{-1} \ \text{prop}[\theta, q+k[3]]^{-1} \ \text{prop}[\theta, p+q+2 \ k[3]]^{-1} \ \text{dot}[p,q]^{-1} \\ & +(-\text{dot}[p,p]-2 \ \text{dot}[p,q]-\text{dot}[q,q])^{-1} \ \text{prop}[\theta, p+k[3]]^{-1} \ \text{prop}[\theta, p+q+k[3]]^{-1} \ \text{prop}[\theta, p+q+2 \ k[3]]^{-1} \ \text{dot}[p,q]^{-1} \\ & +(-\text{dot}[p,p]-2 \ \text{dot}[p,q]-\text{dot}[q,q])^{-1} \ \text{prop}[\theta, q+k[3]]^{-1} \ \text{prop}[\theta, p+q+k[3]]^{-1} \ \text{prop}[\theta, p+q+2 \ k[3]]^{-1} \ \text{dot}[p,q]^{-1} \\ & +1/2 \ (-\text{dot}[p,p]+2 \ \text{dot}[p,q]-\text{dot}[q,q])^{-1} \ \text{prop}[\theta, k[3]]^{-1} \ \text{prop}[\theta, p+k[3]]^{-1} \ \text{prop}[\theta, q+k[3]]^{-1} \ \text{dot}[p,q]^{-1} \\ & -(-\text{dot}[p,p]+2 \ \text{dot}[p,q]-\text{dot}[q,q])^{-1} \ \text{prop}[\theta, k[3]]^{-1} \ \text{prop}[\theta, p+k[3]]^{-1} \ \text{prop}[\theta, p+q+2 \ k[3]]^{-1} \ \text{dot}[p,q]^{-1} \\ & -(-\text{dot}[p,p]+2 \ \text{dot}[p,q]-\text{dot}[q,q])^{-1} \ \text{prop}[\theta, q+k[3]]^{-1} \ \text{prop}[\theta, p+q+k[3]]^{-1} \ \text{prop}[\theta, p+q+2 \ k[3]]^{-1} \ \text{dot}[p,q]^{-1} \\ & +1/2 \ (-\text{dot}[p,p]+2 \ \text{dot}[p,q]-\text{dot}[q,q])^{-1} \ \text{prop}[\theta, p+k[3]]^{-1} \ \text{prop}[\theta, q+k[3]]^{-1} \ \text{prop}[\theta, p+q+k[3]]^{-1} \ \text{dot}[p,q]^{-1} \\ & -(-\text{dot}[p,p]+2 \ \text{dot}[p,q]-\text{dot}[q,q])^{-1} \ \text{prop}[\theta, p+k[3]]^{-1} \ \text{prop}[\theta, p+q+k[3]]^{-1} \ \text{prop}[\theta, p+q+2 \ k[3]]^{-1} \ \text{dot}[p,q]^{-1} \\ & -(-\text{dot}[p,p]+2 \ \text{dot}[p,q]-\text{dot}[q,q])^{-1} \ \text{prop}[\theta, q+k[3]]^{-1} \ \text{prop}[\theta, p+q+k[3]]^{-1} \ \text{prop}[\theta, p+q+2 \ k[3]]^{-1} \ \text{dot}[p,q]^{-1} \end{aligned}$$



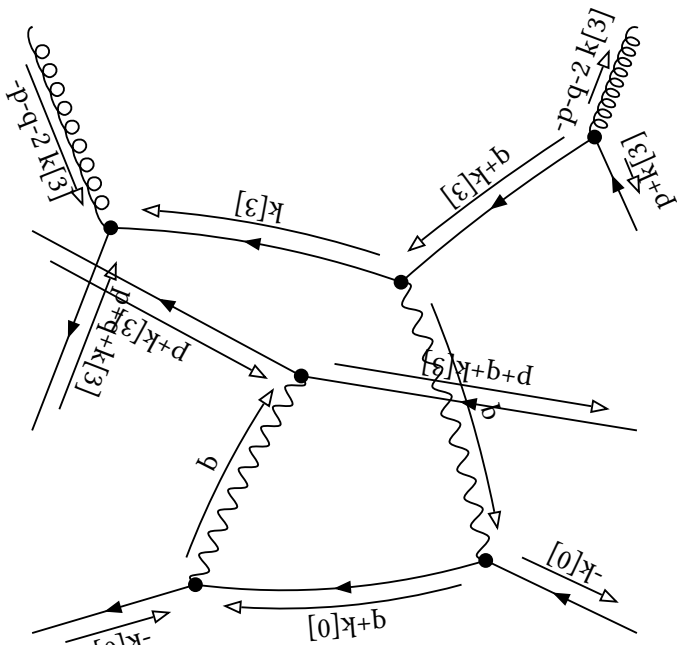
-3+8-15



-3-13-15+16



-3+10-13

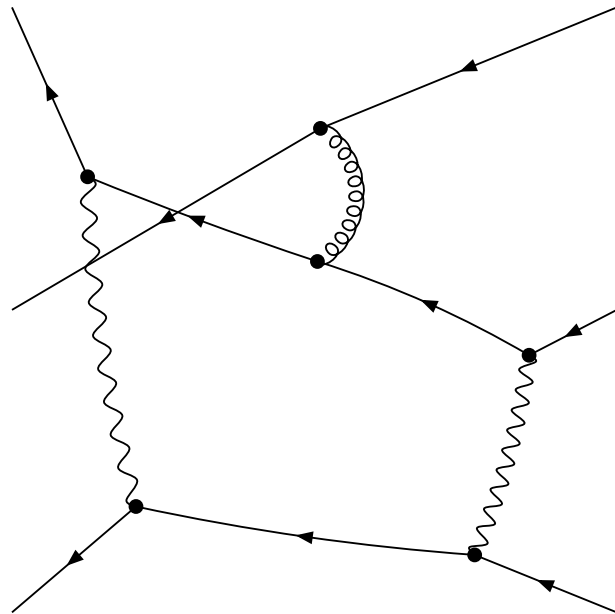


-3+8+10-16

final

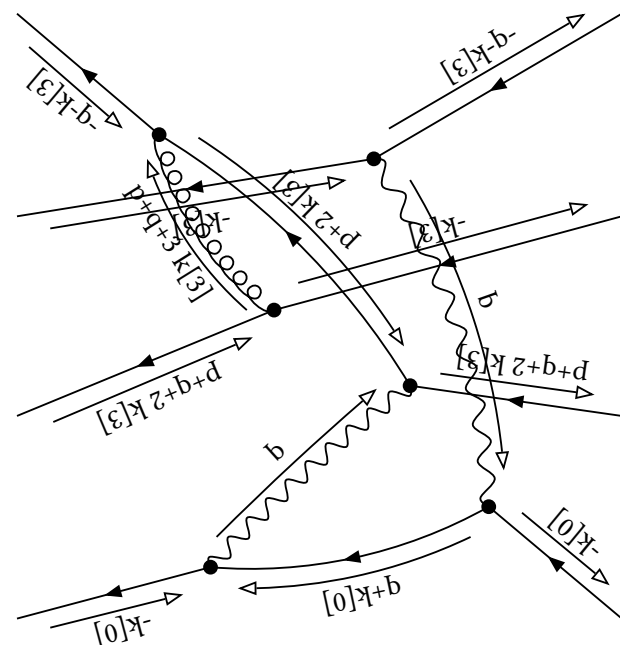
Denominator:

$$\text{prop}[0,k[3]]^{-1} \text{prop}[0,p+k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+2 \ k[3]]^{-1} \text{prop}[0,p-q+k[3]]^{-1}$$



-1+8-13

initial

$$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+2 \ k[3]]^{-1} \text{prop}[0,p+q+2 \ k[3]]^{-1} \text{prop}[0,p+q+3 \ k[3]]^{-1}$$
$$\begin{aligned} & \frac{1}{2} (-\dot{\text{dot}}[p,q]+1/2 \dot{\text{dot}}[q,q])^{-1} (-1/2 \dot{\text{dot}}[p,p]-\dot{\text{dot}}[p,q]-1/2 \dot{\text{dot}}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+q+2 k[3]]^{-1} \\ & -3/4 (-\dot{\text{dot}}[p,q]+1/2 \dot{\text{dot}}[q,q])^{-1} (-1/2 \dot{\text{dot}}[p,p]-\dot{\text{dot}}[p,q]-1/2 \dot{\text{dot}}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+q+3 k[3]]^{-1} \\ & +(-\dot{\text{dot}}[p,q]+1/2 \dot{\text{dot}}[q,q])^{-1} (-1/2 \dot{\text{dot}}[p,p]-\dot{\text{dot}}[p,q]-1/2 \dot{\text{dot}}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,p+2 k[3]]^{-1} \text{prop}[0,p+q+2 k[3]]^{-1} \\ & -3/2 (-\dot{\text{dot}}[p,q]+1/2 \dot{\text{dot}}[q,q])^{-1} (-1/2 \dot{\text{dot}}[p,p]-\dot{\text{dot}}[p,q]-1/2 \dot{\text{dot}}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,p+2 k[3]]^{-1} \text{prop}[0,p+q+3 k[3]]^{-1} \\ & -3/2 (-\dot{\text{dot}}[p,q]+1/2 \dot{\text{dot}}[q,q])^{-1} (-1/2 \dot{\text{dot}}[p,p]-\dot{\text{dot}}[p,q]-1/2 \dot{\text{dot}}[q,q])^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+q+2 k[3]]^{-1} \text{prop}[0,p+q+3 k[3]]^{-1} \\ & -3 (-\dot{\text{dot}}[p,q]+1/2 \dot{\text{dot}}[q,q])^{-1} (-1/2 \dot{\text{dot}}[p,p]-\dot{\text{dot}}[p,q]-1/2 \dot{\text{dot}}[q,q])^{-1} \text{prop}[0,p+2 k[3]]^{-1} \text{prop}[0,p+q+2 k[3]]^{-1} \text{prop}[0,p+q+3 k[3]]^{-1} \\ & -1/2 (-\dot{\text{dot}}[p,q]+1/2 \dot{\text{dot}}[q,q])^{-1} (-1/2 \dot{\text{dot}}[p,p]+2 \dot{\text{dot}}[p,q]-2 \dot{\text{dot}}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+2 k[3]]^{-1} \\ & +3/4 (-\dot{\text{dot}}[p,q]+1/2 \dot{\text{dot}}[q,q])^{-1} (-1/2 \dot{\text{dot}}[p,p]+2 \dot{\text{dot}}[p,q]-2 \dot{\text{dot}}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+q+3 k[3]]^{-1} \\ & +3/2 (-\dot{\text{dot}}[p,q]+1/2 \dot{\text{dot}}[q,q])^{-1} (-1/2 \dot{\text{dot}}[p,p]+2 \dot{\text{dot}}[p,q]-2 \dot{\text{dot}}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,p+2 k[3]]^{-1} \text{prop}[0,p+q+3 k[3]]^{-1} \\ & -(-\dot{\text{dot}}[p,q]+1/2 \dot{\text{dot}}[q,q])^{-1} (-1/2 \dot{\text{dot}}[p,p]+2 \dot{\text{dot}}[p,q]-2 \dot{\text{dot}}[q,q])^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+2 k[3]]^{-1} \text{prop}[0,p+q+2 k[3]]^{-1} \\ & +3/2 (-\dot{\text{dot}}[p,q]+1/2 \dot{\text{dot}}[q,q])^{-1} (-1/2 \dot{\text{dot}}[p,p]+2 \dot{\text{dot}}[p,q]-2 \dot{\text{dot}}[q,q])^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+q+2 k[3]]^{-1} \text{prop}[0,p+q+3 k[3]]^{-1} \\ & +3 (-\dot{\text{dot}}[p,q]+1/2 \dot{\text{dot}}[q,q])^{-1} (-1/2 \dot{\text{dot}}[p,p]+2 \dot{\text{dot}}[p,q]-2 \dot{\text{dot}}[q,q])^{-1} \text{prop}[0,p+2 k[3]]^{-1} \text{prop}[0,p+q+2 k[3]]^{-1} \text{prop}[0,p+q+3 k[3]]^{-1} \end{aligned}$$


final

Denominator:

0

embedding 36 [1, 0, 0, -2]

initial

Denominator:

0

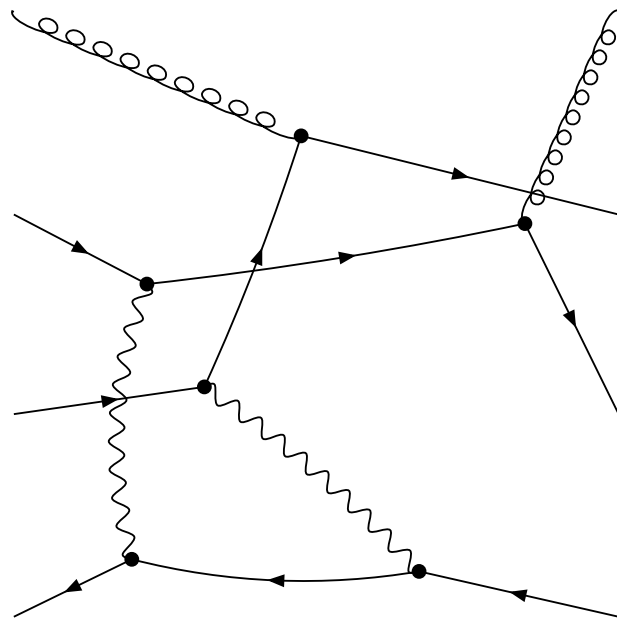
Partial Fractioned Denominator:

0

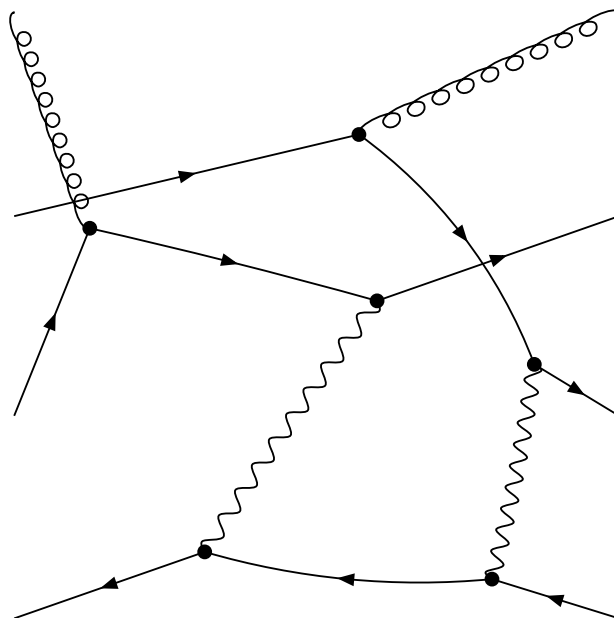
final

Denominator:

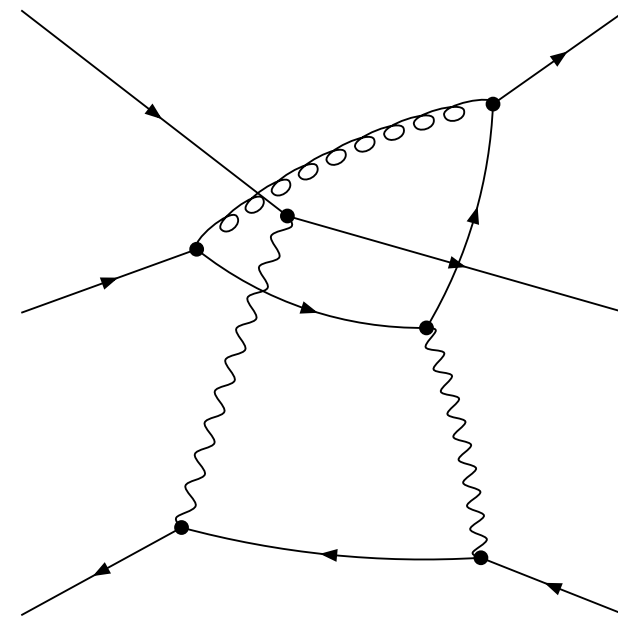
$\text{prop}[0,k[2]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,1/2 \ p+1/2 \ q]^{-1} \text{prop}[0,1/2 \ p-1/2 \ q]^{-1} \text{prop}[0,1/2 \ p+1/2 \ q+k[2]]^{-1}$



-1-8+15+16



-1-10+13+16



-1+13+15

embedding 37 [1, 0, 0, -1]

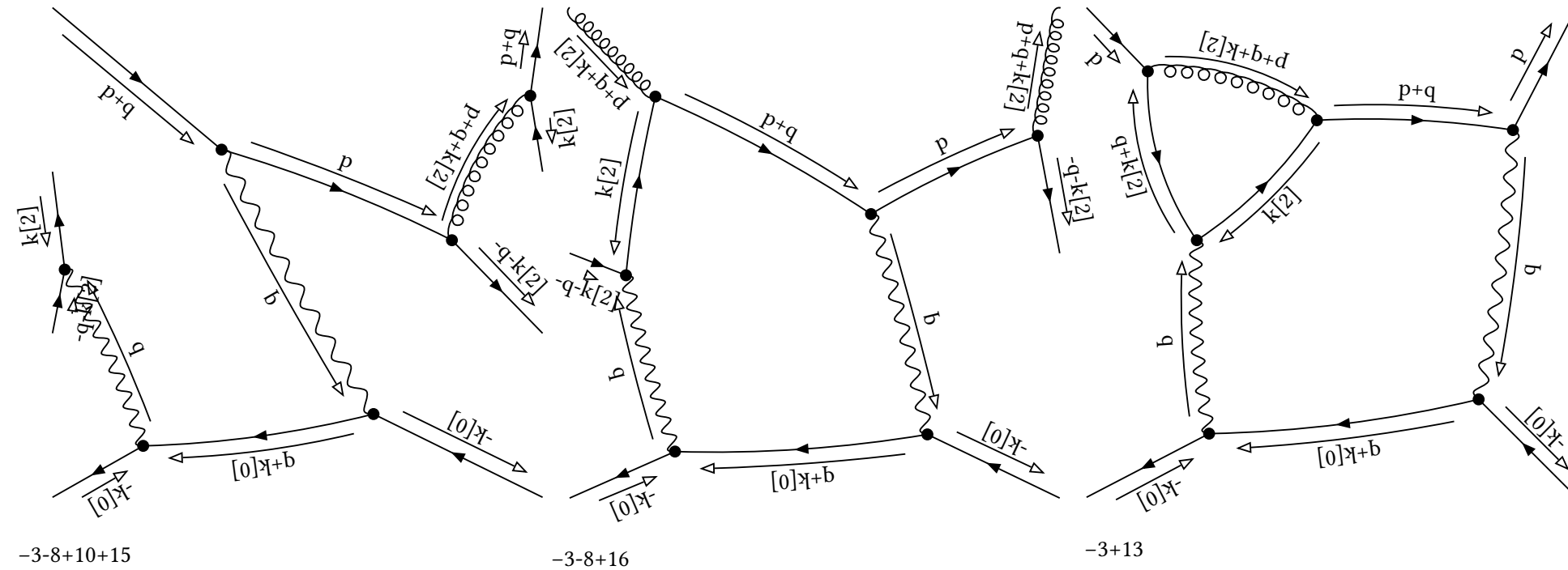
initial

Denominator:

$$\text{prop}[\theta, p]^{-1} \text{prop}[\theta, k[2]]^{-1} \text{prop}[\theta, p+q]^{-1} \text{prop}[\theta, q+k[2]]^{-1} \text{prop}[\theta, p+q+k[2]]^{-1}$$

Partial Fractioned Denominator:

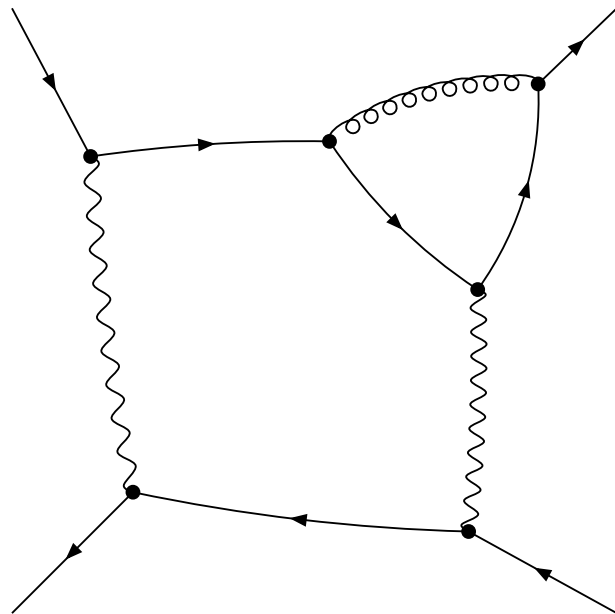
$$(\text{dot}[p,p]+2 \text{ dot}[p,q]+\text{dot}[q,q])^{-1} \text{prop}[\theta,k[2]]^{-1} \text{prop}[\theta,q+k[2]]^{-1} \text{prop}[\theta,p+q+k[2]]^{-1} \text{dot}[p,p]^{-1}$$



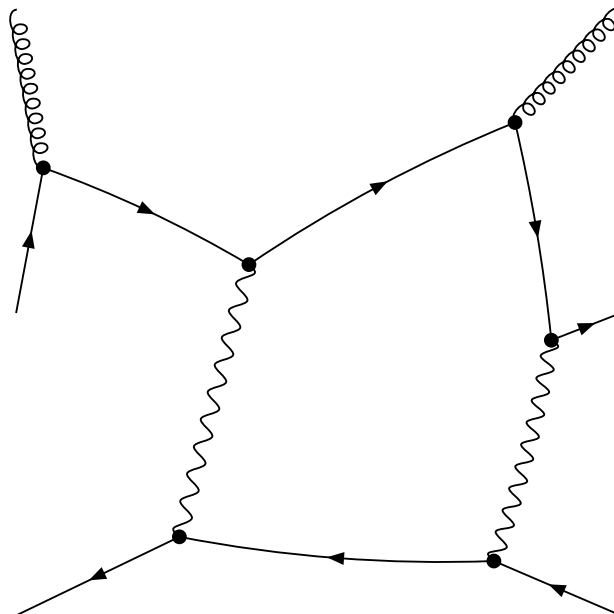
final

Denominator:

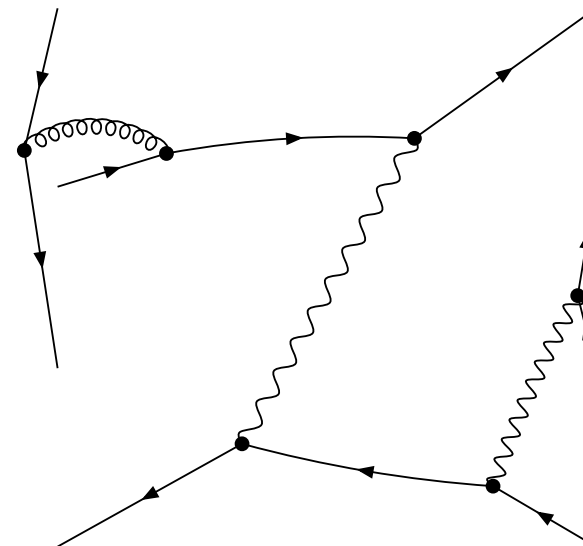
$\text{prop}[0,p]^{-1} \text{prop}[0,k[2]]^{-1} \text{prop}[0,p+k[2]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,p-q]^{-1}$



-1+15



-1-10+16



-1+8-10+13

embedding 38 [1, 0, 0, 0]

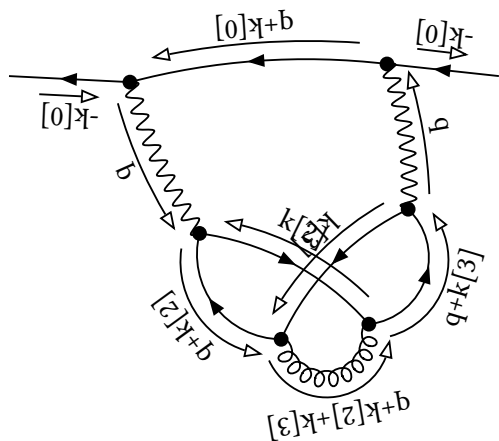
initial

Denominator:

$$\text{prop}[\theta, k[2]]^{-1} \text{prop}[\theta, k[3]]^{-1} \text{prop}[\theta, q+k[2]]^{-1} \text{prop}[\theta, q+k[3]]^{-1} \text{prop}[\theta, q+k[2]+k[3]]^{-1}$$

Partial Fractioned Denominator:

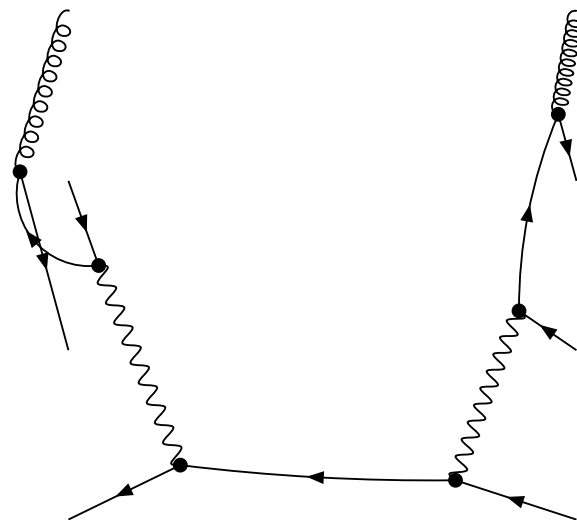
$$\text{prop}[\theta, k[2]]^{-1} \text{prop}[\theta, k[3]]^{-1} \text{prop}[\theta, q+k[2]]^{-1} \text{prop}[\theta, q+k[3]]^{-1} \text{prop}[\theta, q+k[2]+k[3]]^{-1}$$



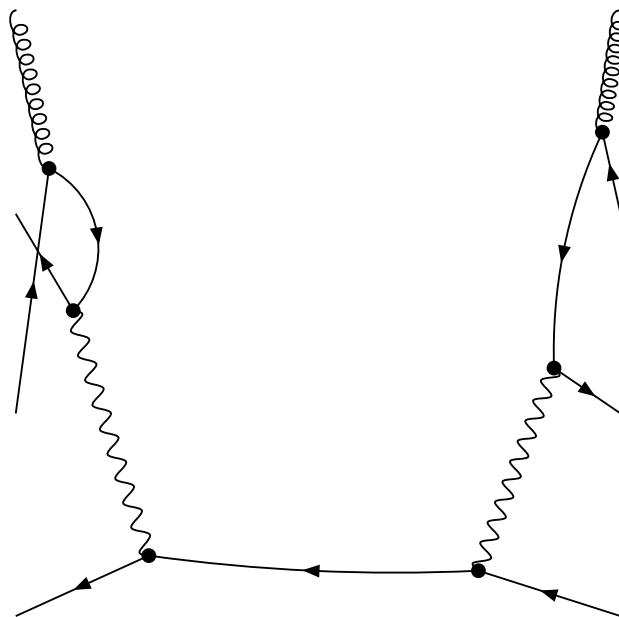
final

Denominator:

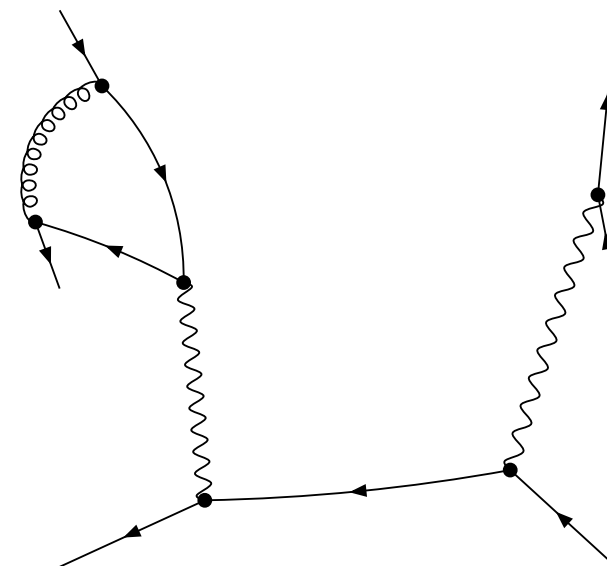
$$\text{prop}[0,k[2]]^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,q+k[2]+k[3]]^{-1}$$



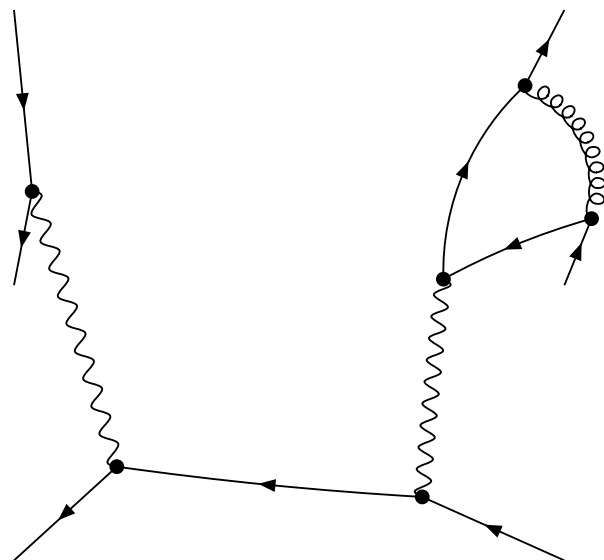
$$-1+8+15-16$$



$$-1-10-13+16$$



$$-1+8-10$$



$$-1-13+15$$

embedding 39 [1, 0, 0, 1]

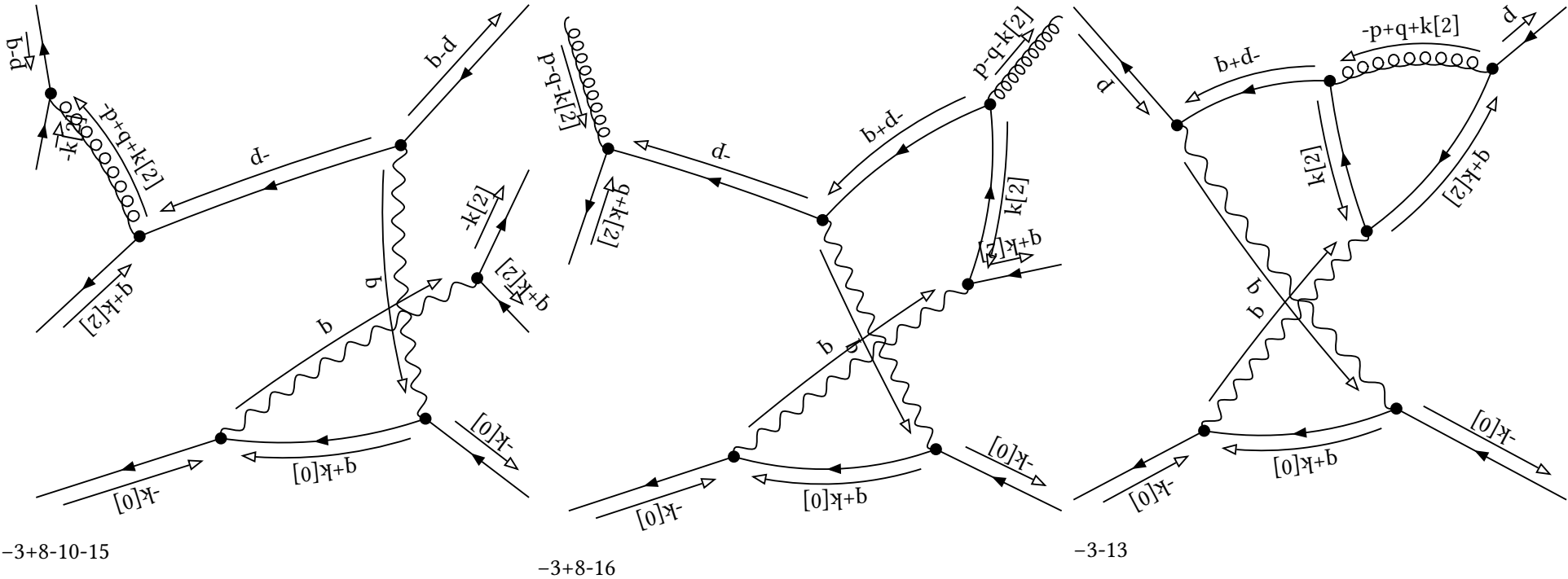
initial

Denominator:

$$\text{prop}[0,k[2]]^{-1} \text{prop}[0,-p]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,-p+q]^{-1} \text{prop}[0,-p+q+k[2]]^{-1}$$

Partial Fractioned Denominator:

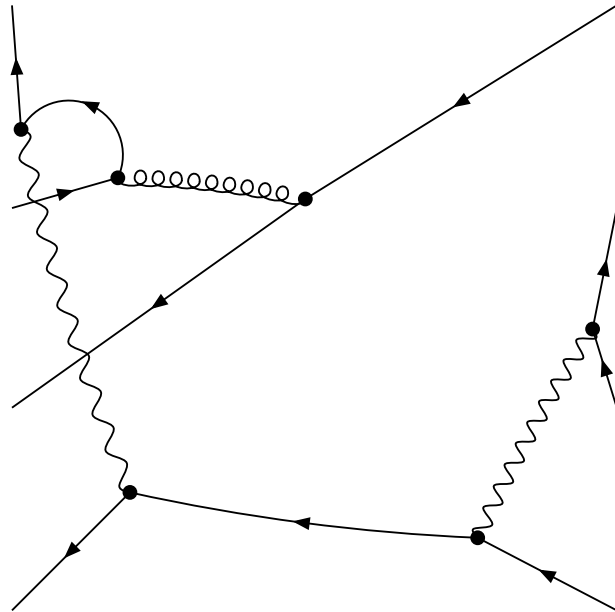
$$(\text{dot}[p,p]-2 \text{dot}[p,q]+\text{dot}[q,q])^{-1} \text{prop}[0,k[2]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,-p+q+k[2]]^{-1} \text{dot}[p,p]^{-1}$$



final

Denominator:

$\text{prop}[0,k[2]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,-p+q]^{-1} \text{prop}[0,-p+2 q]^{-1} \text{prop}[0,-p+2 q+k[2]]^{-1}$



-1+8-10-13

embedding 40 [1, 0, 1, -2]

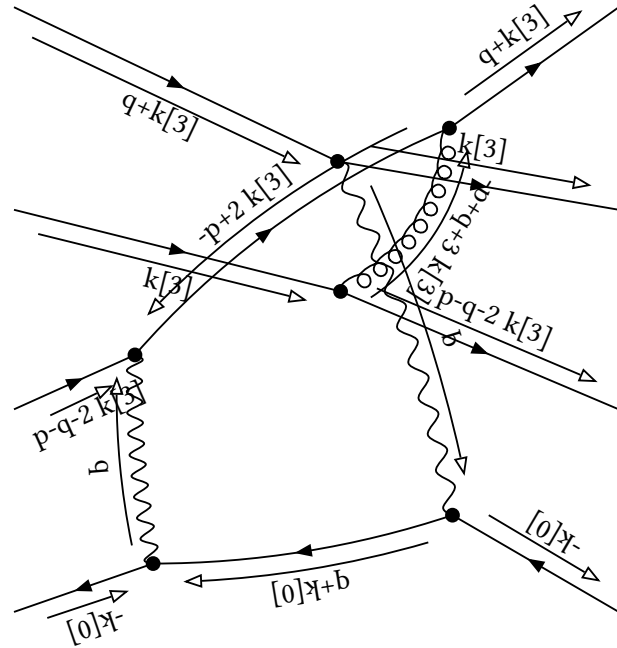
initial

Denominator:

$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+2 k[3]]^{-1} \text{prop}[0, -p+q+2 k[3]]^{-1} \text{prop}[0, -p+q+3 k[3]]^{-1}$$

Partial Fractioned Denominator:

$$\begin{aligned} & -1/2 (\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+2 k[3]]^{-1} \\ & + 3/4 (\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+q+3 k[3]]^{-1} \\ & + 3/2 (\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -p+2 k[3]]^{-1} \text{prop}[0, -p+q+3 k[3]]^{-1} \\ & - (\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+2 k[3]]^{-1} \text{prop}[0, -p+q+2 k[3]]^{-1} \\ & + 3/2 (\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+q+2 k[3]]^{-1} \text{prop}[0, -p+q+3 k[3]]^{-1} \\ & + 3 (\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, -p+2 k[3]]^{-1} \text{prop}[0, -p+q+2 k[3]]^{-1} \text{prop}[0, -p+q+3 k[3]]^{-1} \\ & + 1/2 (\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+q+2 k[3]]^{-1} \\ & - 3/4 (\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+q+3 k[3]]^{-1} \\ & + (\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -p+2 k[3]]^{-1} \text{prop}[0, -p+q+2 k[3]]^{-1} \\ & - 3/2 (\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -p+2 k[3]]^{-1} \text{prop}[0, -p+q+3 k[3]]^{-1} \\ & - 3/2 (\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+q+2 k[3]]^{-1} \text{prop}[0, -p+q+3 k[3]]^{-1} \\ & - 3 (\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, -p+2 k[3]]^{-1} \text{prop}[0, -p+q+2 k[3]]^{-1} \text{prop}[0, -p+q+3 k[3]]^{-1} \end{aligned}$$

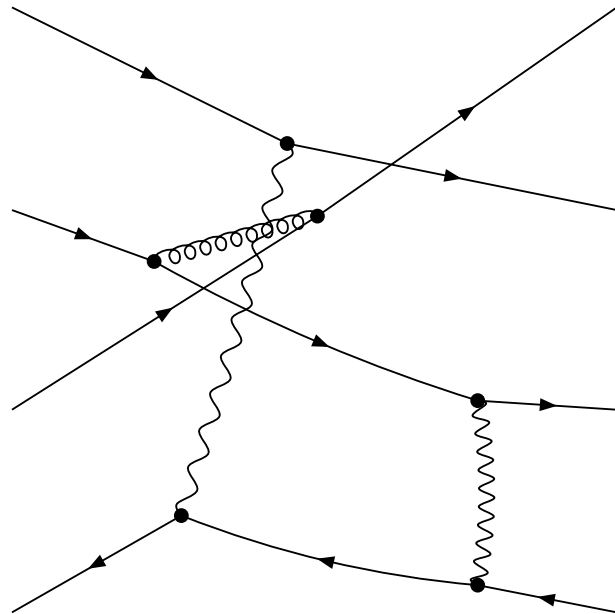


$$-3-8+13+15$$

final

Denominator:

$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-p+q+2 \ k[3]]^{-1} \text{prop}[0,-p+2 \ q+2 \ k[3]]^{-1} \text{prop}[0,-p+2 \ q+3 \ k[3]]^{-1}$



$-1-10+13+15$

embedding 41 [1, 0, 1, -1]

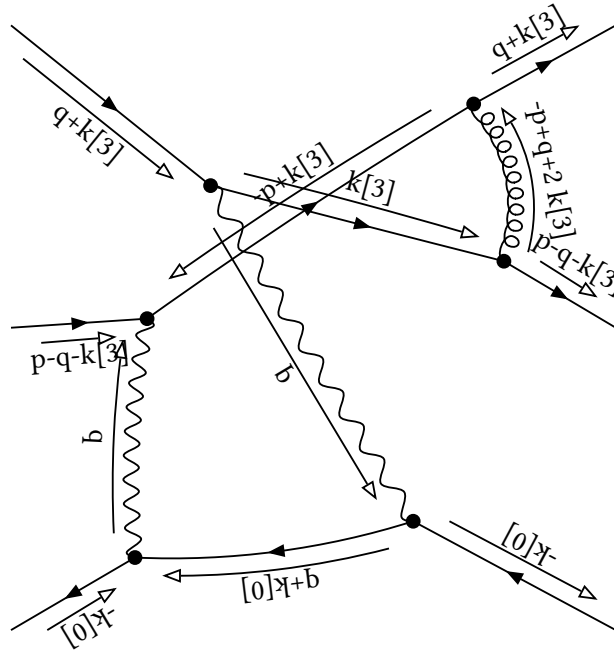
initial

Denominator:

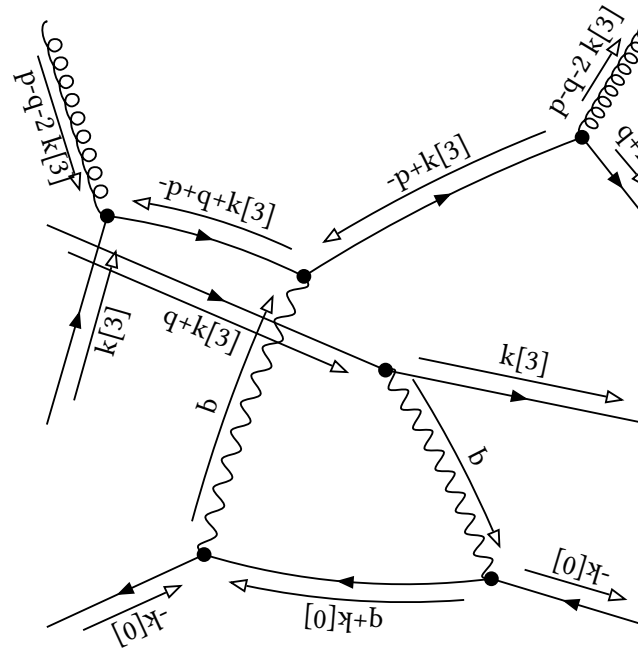
$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+k[3]]^{-1} \text{prop}[0, -p+q+k[3]]^{-1} \text{prop}[0, -p+q+2 k[3]]^{-1}$$

Partial Fractioned Denominator:

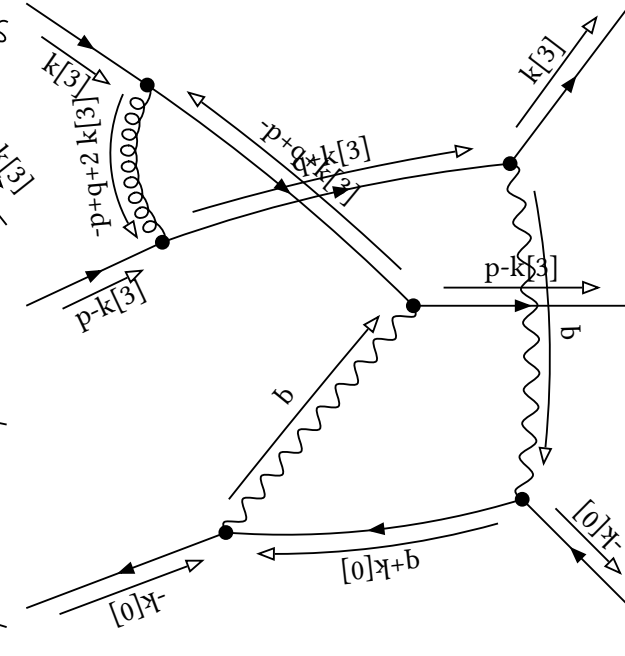
$$\begin{aligned} & -1/2 (-\text{dot}[p, p] - 2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & + (-\text{dot}[p, p] - 2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+q+2 k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & + (-\text{dot}[p, p] - 2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -p+k[3]]^{-1} \text{prop}[0, -p+q+2 k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & -1/2 (-\text{dot}[p, p] - 2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+k[3]]^{-1} \text{prop}[0, -p+q+k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & + (-\text{dot}[p, p] - 2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+q+k[3]]^{-1} \text{prop}[0, -p+q+2 k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & + (-\text{dot}[p, p] - 2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} \text{prop}[0, -p+k[3]]^{-1} \text{prop}[0, -p+q+k[3]]^{-1} \text{prop}[0, -p+q+2 k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & +1/2 (-\text{dot}[p, p] + 2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+q+k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & - (-\text{dot}[p, p] + 2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+q+2 k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & +1/2 (-\text{dot}[p, p] + 2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -p+k[3]]^{-1} \text{prop}[0, -p+q+k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & - (-\text{dot}[p, p] + 2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -p+k[3]]^{-1} \text{prop}[0, -p+q+2 k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & - (-\text{dot}[p, p] + 2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+q+k[3]]^{-1} \text{prop}[0, -p+q+2 k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & - (-\text{dot}[p, p] + 2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} \text{prop}[0, -p+k[3]]^{-1} \text{prop}[0, -p+q+k[3]]^{-1} \text{prop}[0, -p+q+2 k[3]]^{-1} \text{dot}[p, q]^{-1} \end{aligned}$$



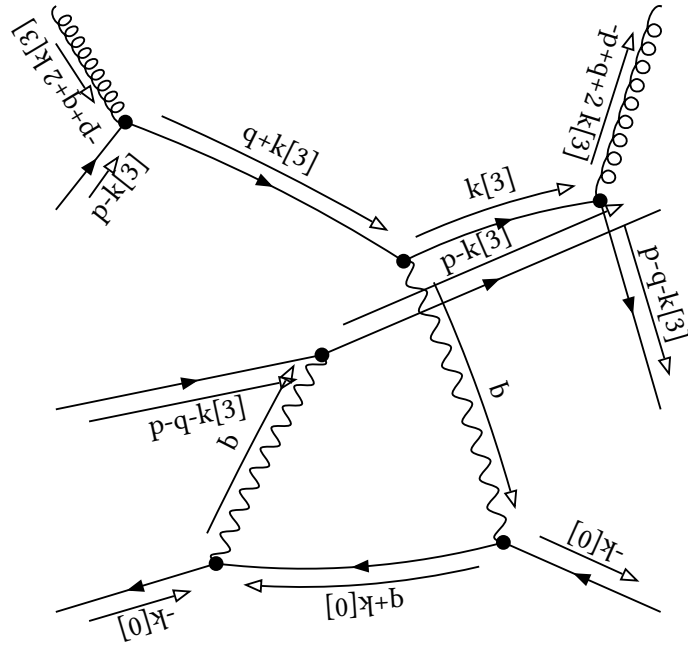
-3-8+15



-3+13+15-16



-3-10+13

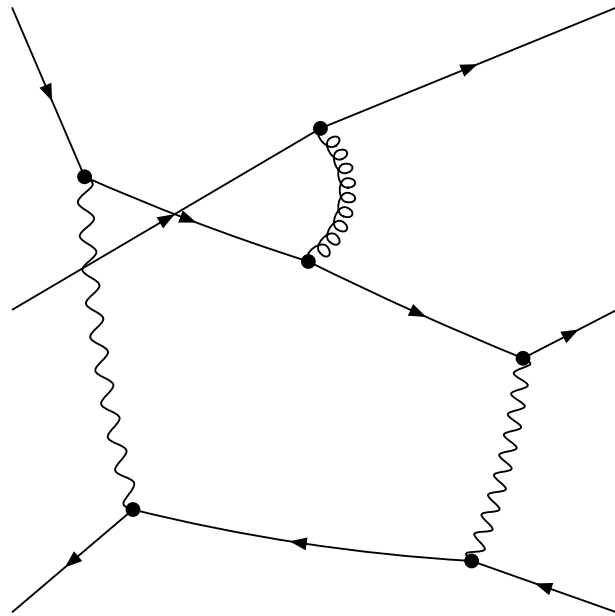


-3-8-10+16

final

Denominator:

$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-p+q+k[3]]^{-1} \text{prop}[0,-p+2 \ q+k[3]]^{-1} \text{prop}[0,-p+2 \ q+2 \ k[3]]^{-1}$



-1-10+15

embedding 42 [1, 0, 1, 0]

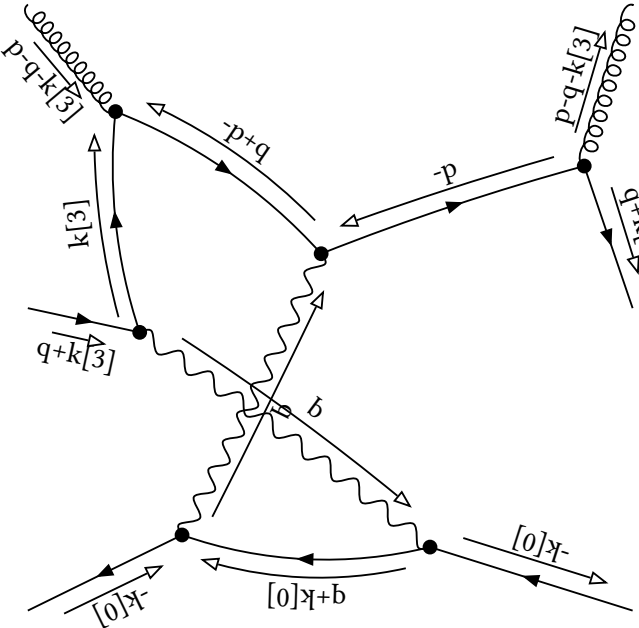
initial

Denominator:

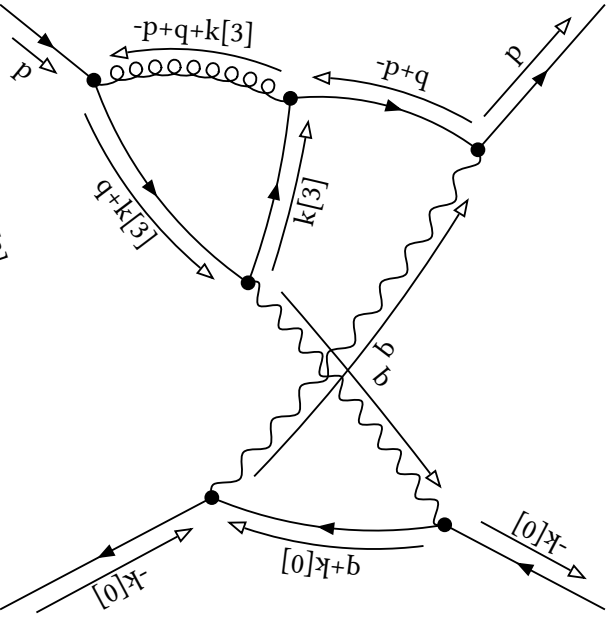
$\text{prop}[0,k[3]]^{-1} \text{prop}[0,-p]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-p+q]^{-1} \text{prop}[0,-p+q+k[3]]^{-1}$

Partial Fractioned Denominator:

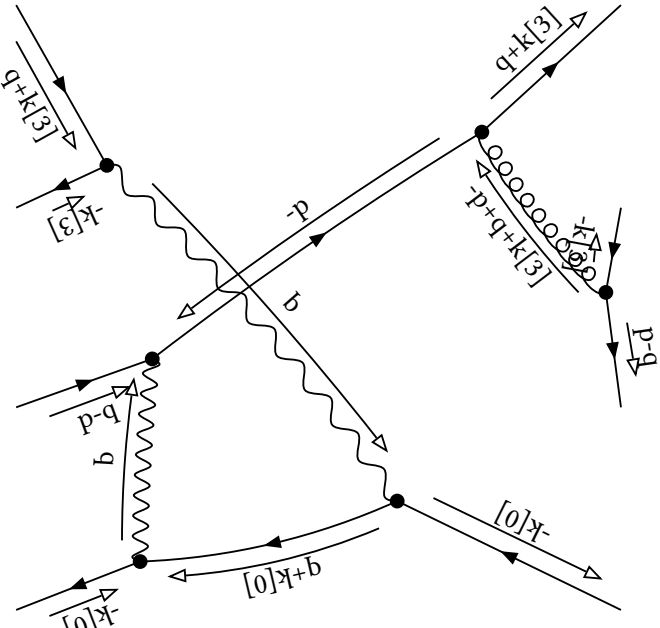
$(\text{dot}[p,p]-2 \text{dot}[p,q]+\text{dot}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-p+q+k[3]]^{-1} \text{dot}[p,p]^{-1}$



-3+15-16



-3-10

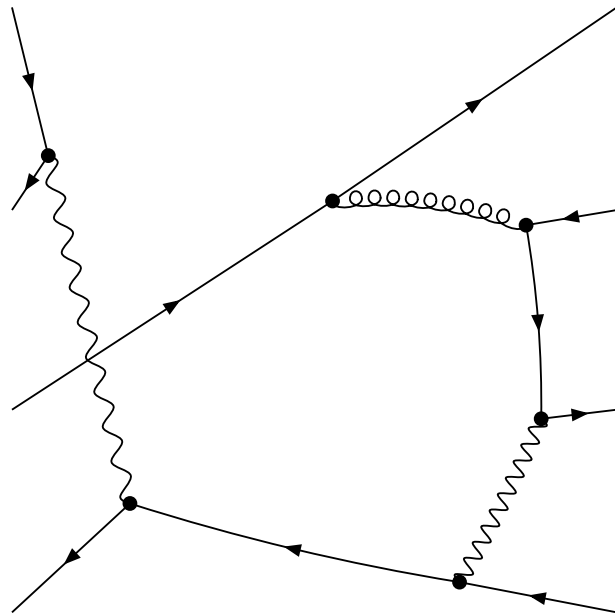


-3-8-13+15

final

Denominator:

$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-p+q]^{-1} \text{prop}[0,-p+2 q]^{-1} \text{prop}[0,-p+2 q+k[3]]^{-1}$



-1-10-13+15

embedding 43 [1, 0, 1, 1]

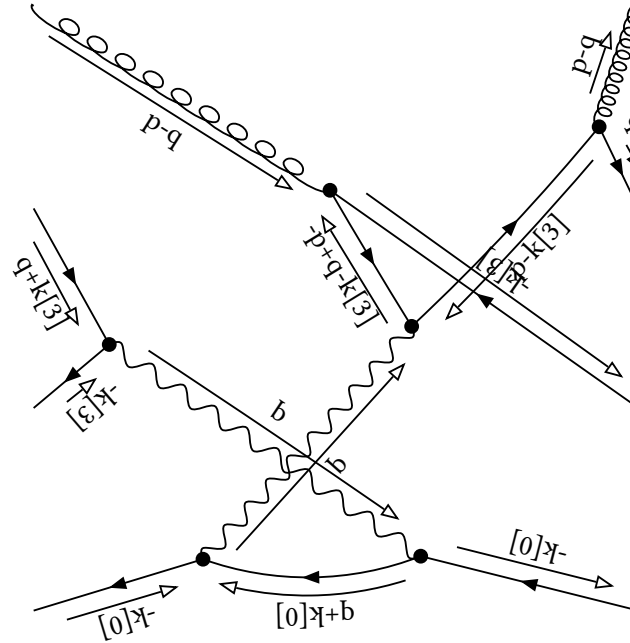
initial

Denominator:

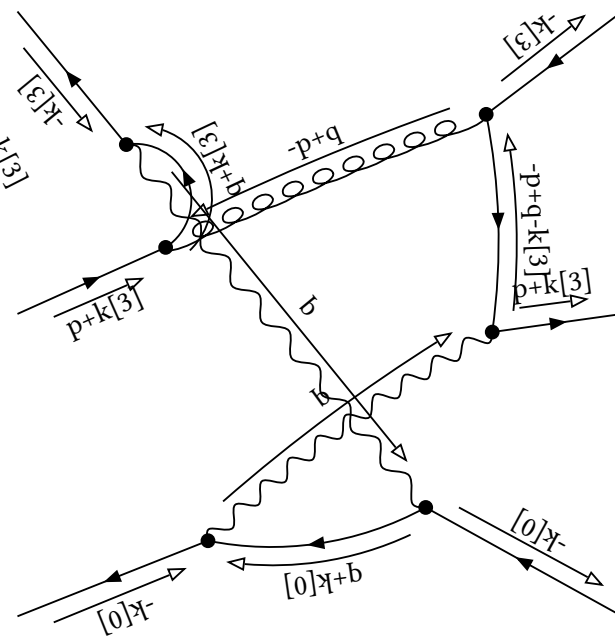
$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+q]^{-1} \text{prop}[0, -p-k[3]]^{-1} \text{prop}[0, -p+q-k[3]]^{-1}$$

Partial Fractioned Denominator:

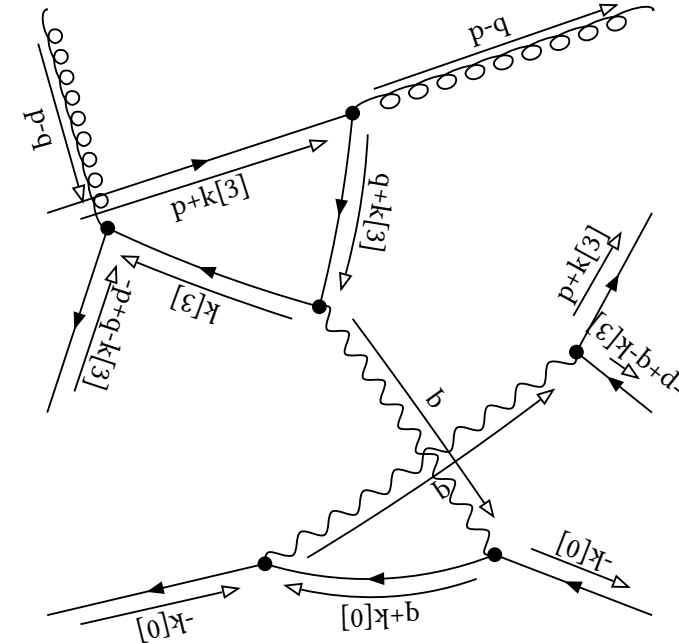
$$\begin{aligned} & (-2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} (\text{dot}[p, p] - 2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-k[3]]^{-1} \\ & - (-2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} (\text{dot}[p, p] - 2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+q-k[3]]^{-1} \\ & + (-2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} (\text{dot}[p, p] - 2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -p-k[3]]^{-1} \text{prop}[0, -p+q-k[3]]^{-1} \\ & - (-2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} (\text{dot}[p, p] - 2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-k[3]]^{-1} \text{prop}[0, -p+q-k[3]]^{-1} \end{aligned}$$



-3-13+15-16



-3-10-13



-3+8-10-16

final

Denominator:

0

embedding 44 [1, 0, 2, -1]

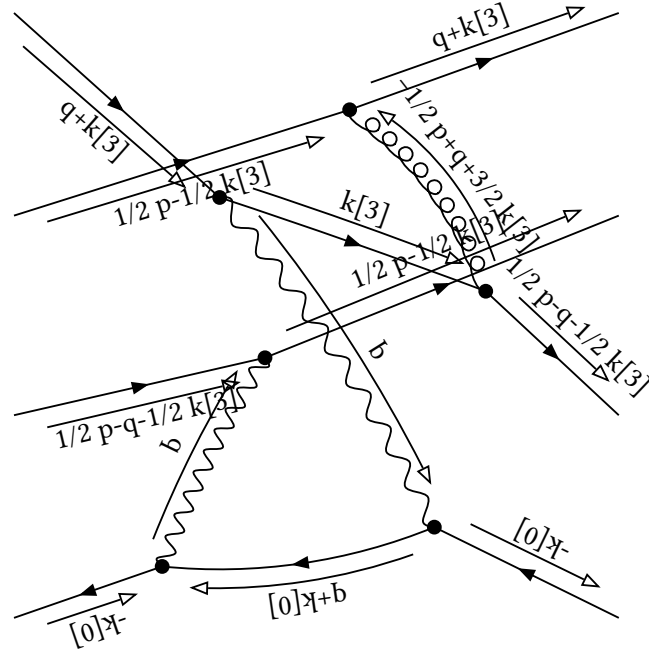
initial

Denominator:

$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 k[3]]^{-1} \text{prop}[0, -1/2 p+q+1/2 k[3]]^{-1} \text{prop}[0, -1/2 p+q+3/2 k[3]]^{-1}$$

Partial Fractioned Denominator:

$$\begin{aligned} & -2 (2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 k[3]]^{-1} \\ & +6 (2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p+q+3/2 k[3]]^{-1} \\ & +3 (2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 k[3]]^{-1} \text{prop}[0, -1/2 p+q+3/2 k[3]]^{-1} \\ & - (2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 k[3]]^{-1} \text{prop}[0, -1/2 p+q+1/2 k[3]]^{-1} \\ & +3 (2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p+q+1/2 k[3]]^{-1} \text{prop}[0, -1/2 p+q+3/2 k[3]]^{-1} \\ & +3/2 (2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, -1/2 p+1/2 k[3]]^{-1} \text{prop}[0, -1/2 p+q+1/2 k[3]]^{-1} \text{prop}[0, -1/2 p+q+3/2 k[3]]^{-1} \\ & +2 (2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p+q+1/2 k[3]]^{-1} \\ & -6 (2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p+q+3/2 k[3]]^{-1} \\ & + (2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 k[3]]^{-1} \text{prop}[0, -1/2 p+q+1/2 k[3]]^{-1} \\ & -3 (2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 k[3]]^{-1} \text{prop}[0, -1/2 p+q+3/2 k[3]]^{-1} \\ & -3 (2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p+q+1/2 k[3]]^{-1} \text{prop}[0, -1/2 p+q+3/2 k[3]]^{-1} \\ & -3/2 (2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, -1/2 p+1/2 k[3]]^{-1} \text{prop}[0, -1/2 p+q+1/2 k[3]]^{-1} \text{prop}[0, -1/2 p+q+3/2 k[3]]^{-1} \end{aligned}$$



final

Denominator:

0

embedding 45 [1, 1, -2, 1]

initial

Denominator:

0

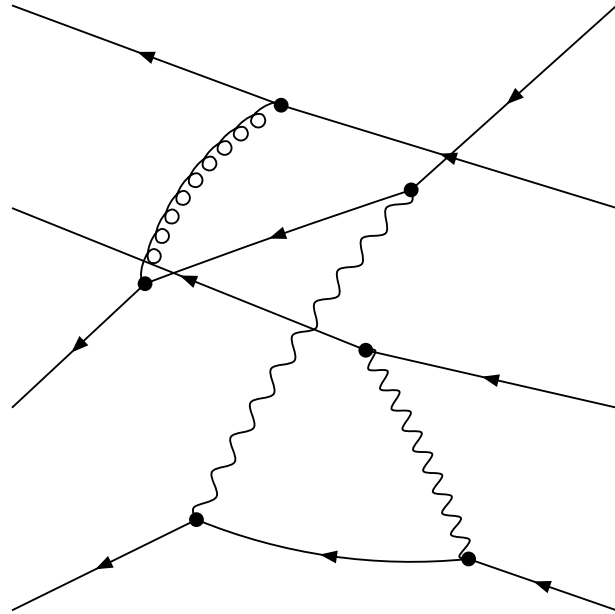
Partial Fractioned Denominator:

0

final

Denominator:

$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,1/2 \ p+1/2 \ k[3]]^{-1} \text{prop}[0,1/2 \ p+q+1/2 \ k[3]]^{-1} \text{prop}[0,1/2 \ p+q+3/2 \ k[3]]^{-1}$



-1+8+10-15

embedding 46 [1, 1, -1, -1]

initial

Denominator:

0

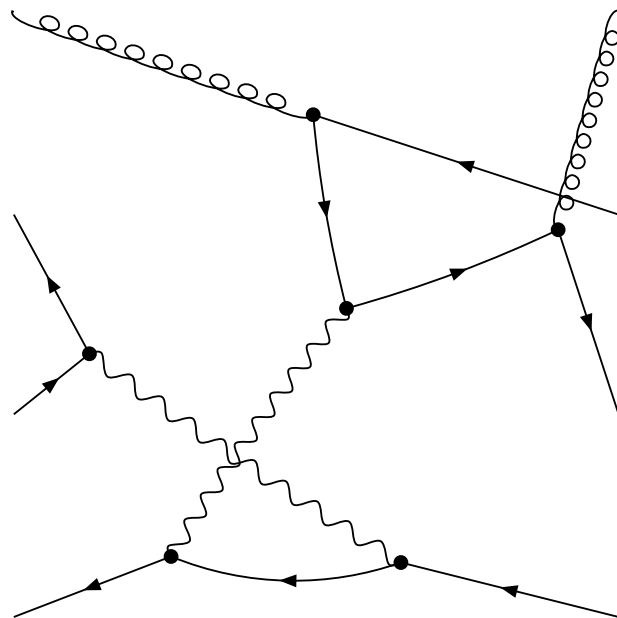
Partial Fractioned Denominator:

0

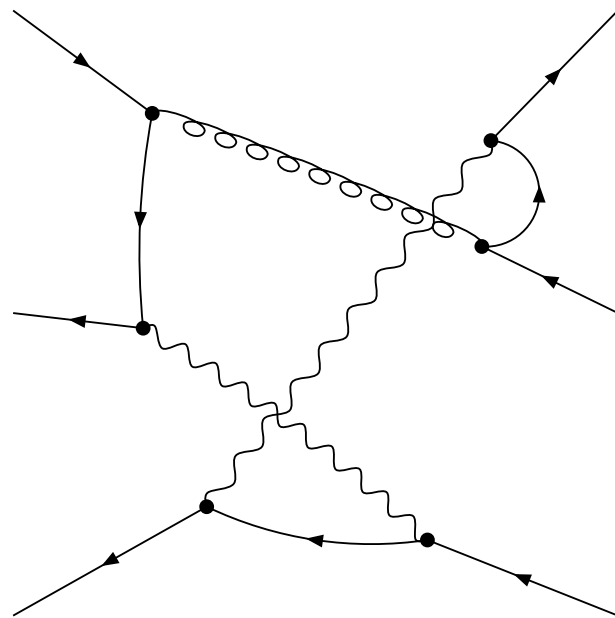
final

Denominator:

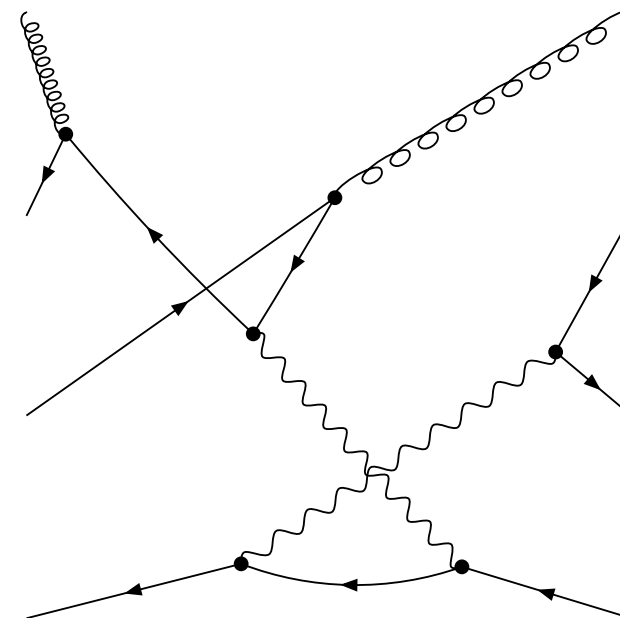
$\text{prop}[0,k[3]]^{-1} \text{prop}[0,p+q]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p-k[3]]^{-1} \text{prop}[0,p+q-k[3]]^{-1}$



$-1-8+10+16$



$-1+10+13$



$-1+13-15+16$

embedding 47 [1, 1, -1, 0]

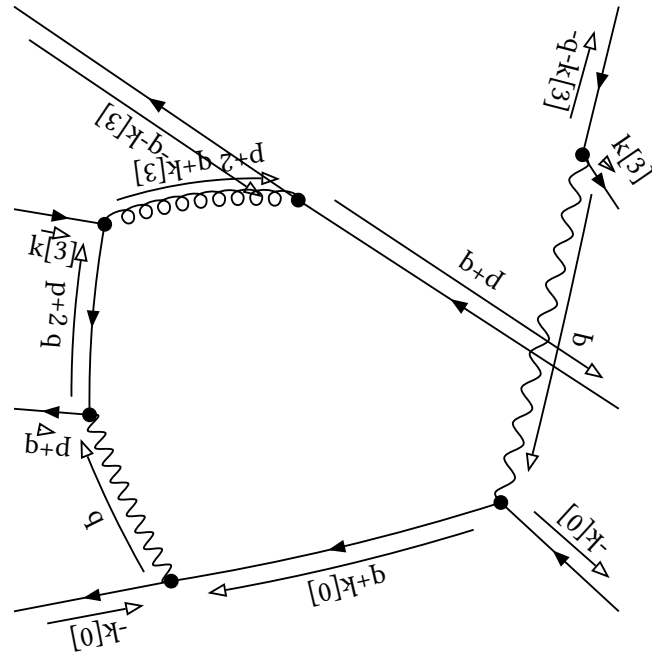
initial

Denominator:

$$\text{prop}[0,k[3]]^{-1} \text{prop}[0,p+q]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+2 \ q]^{-1} \text{prop}[0,p+2 \ q+k[3]]^{-1}$$

Partial Fractioned Denominator:

$$(\text{dot}[p,p]+2 \text{ dot}[p,q]+\text{dot}[q,q])^{-1} (\text{dot}[p,p]+4 \text{ dot}[p,q]+4 \text{ dot}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+2 \text{ } q+k[3]]^{-1}$$

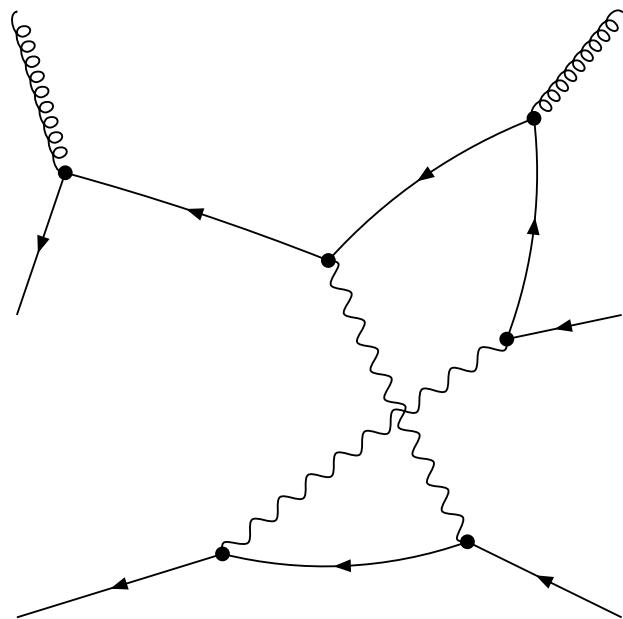


$$-3+10+13-15$$

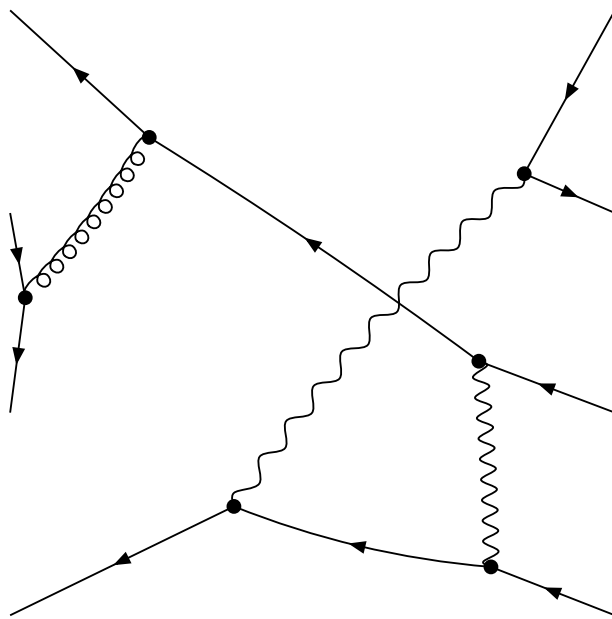
final

Denominator:

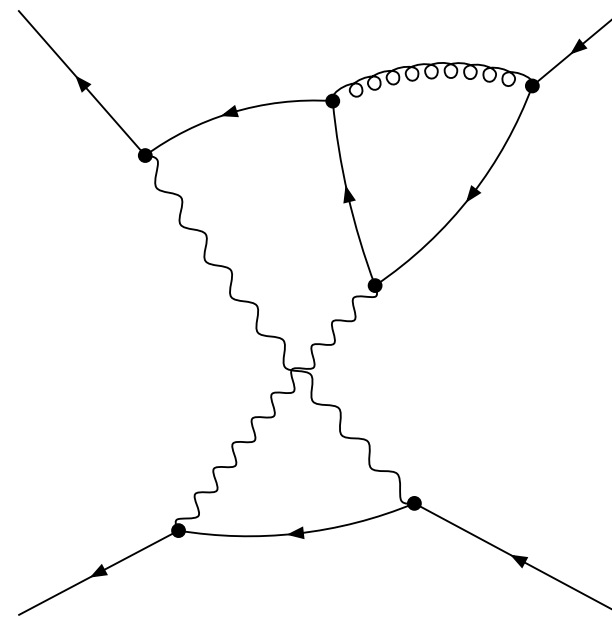
$\text{prop}[0,p]^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,p+q]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+q+k[3]]^{-1}$



-1-15+16



-1+8+13-15



-1+10

embedding 48 [1, 1, -1, 1]

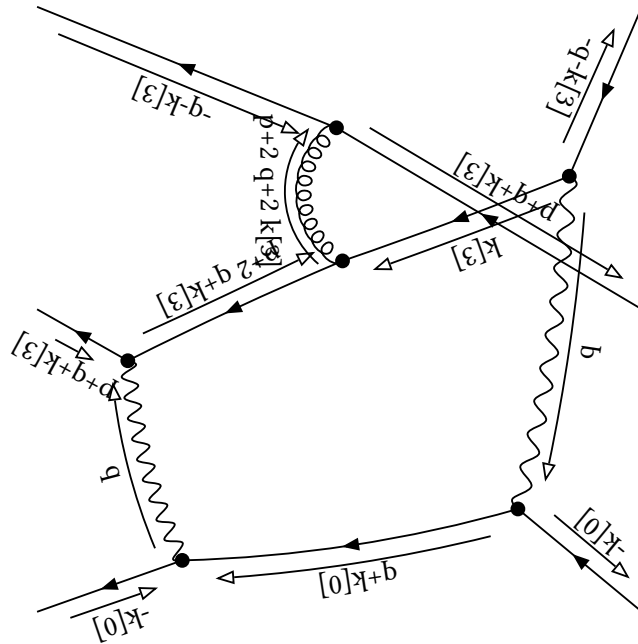
initial

Denominator:

$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, p+q+k[3]]^{-1} \text{prop}[0, p+2 \ q+k[3]]^{-1} \text{prop}[0, p+2 \ q+2 \ k[3]]^{-1}$$

Partial Fractioned Denominator:

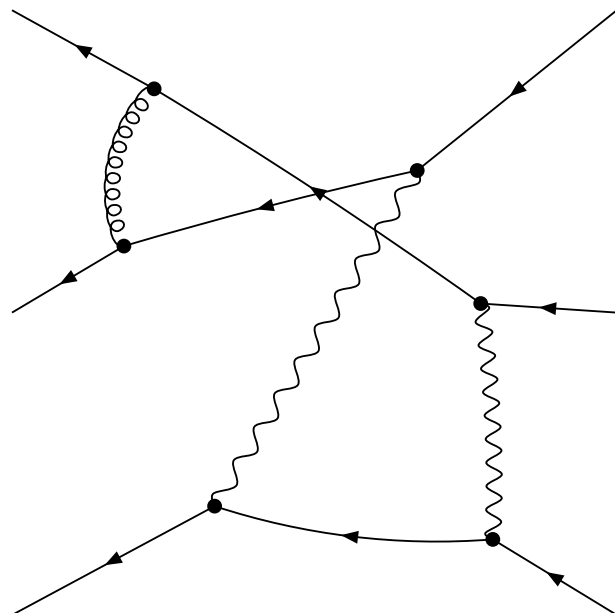
$$\begin{aligned} & (-2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} (-\text{dot}[p, p] - 4 \text{dot}[p, q] - 4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, p+2 \ q+k[3]]^{-1} \\ & -2 (-2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} (-\text{dot}[p, p] - 4 \text{dot}[p, q] - 4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, p+2 \ q+2 \ k[3]]^{-1} \\ & + (-2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} (-\text{dot}[p, p] - 4 \text{dot}[p, q] - 4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, p+q+k[3]]^{-1} \text{prop}[0, p+2 \ q+k[3]]^{-1} \\ & -2 (-2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} (-\text{dot}[p, p] - 4 \text{dot}[p, q] - 4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, p+q+k[3]]^{-1} \text{prop}[0, p+2 \ q+2 \ k[3]]^{-1} \\ & -2 (-2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} (-\text{dot}[p, p] - 4 \text{dot}[p, q] - 4 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, p+2 \ q+k[3]]^{-1} \text{prop}[0, p+2 \ q+2 \ k[3]]^{-1} \\ & -2 (-2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} (-\text{dot}[p, p] - 4 \text{dot}[p, q] - 4 \text{dot}[q, q])^{-1} \text{prop}[0, p+q+k[3]]^{-1} \text{prop}[0, p+2 \ q+k[3]]^{-1} \text{prop}[0, p+2 \ q+2 \ k[3]]^{-1} \\ & + (-2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, p+q+k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & -2 (-2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, p+2 \ q+2 \ k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & -2 (-2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, p+q+k[3]]^{-1} \text{prop}[0, p+2 \ q+2 \ k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & + (-2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, p+q+k[3]]^{-1} \text{prop}[0, p+2 \ q+k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & -2 (-2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, p+2 \ q+k[3]]^{-1} \text{prop}[0, p+2 \ q+2 \ k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & -2 (-2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, p+q+k[3]]^{-1} \text{prop}[0, p+2 \ q+k[3]]^{-1} \text{prop}[0, p+2 \ q+2 \ k[3]]^{-1} \text{dot}[p, p]^{-1} \end{aligned}$$



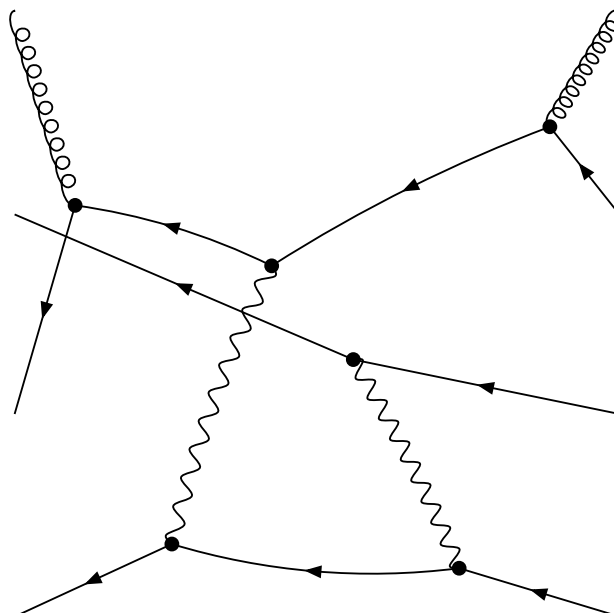
final

Denominator:

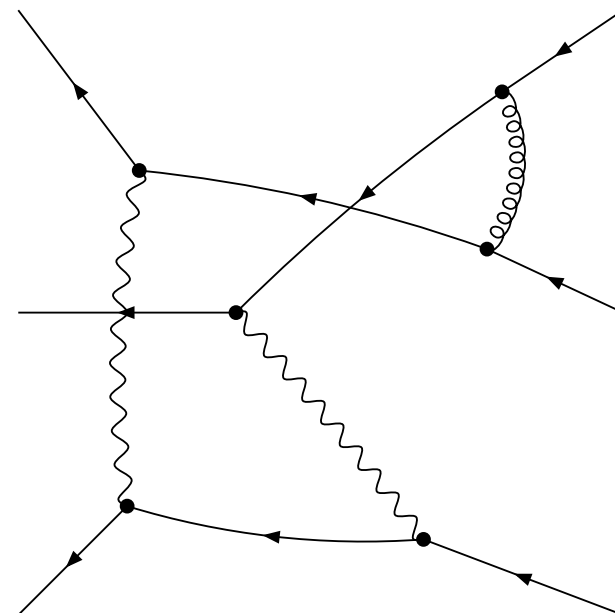
$\text{prop}[0, k[3]]^{-1} \text{prop}[0, p+k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, p+q+k[3]]^{-1} \text{prop}[0, p+q+2 k[3]]^{-1}$



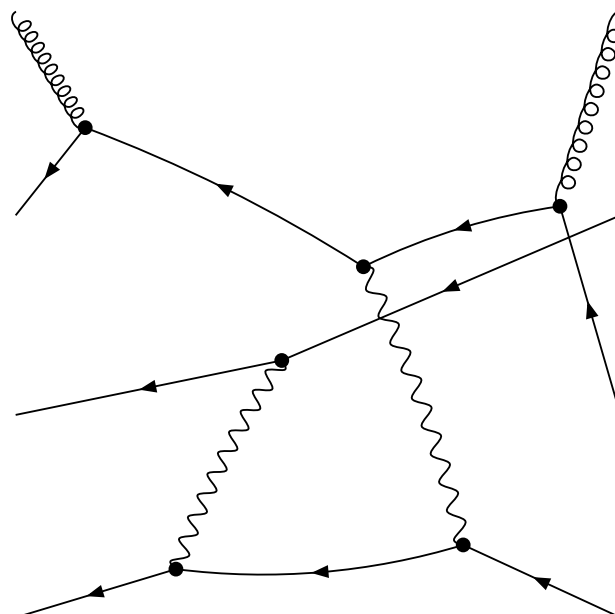
-1+8-15



-1+8+10-16

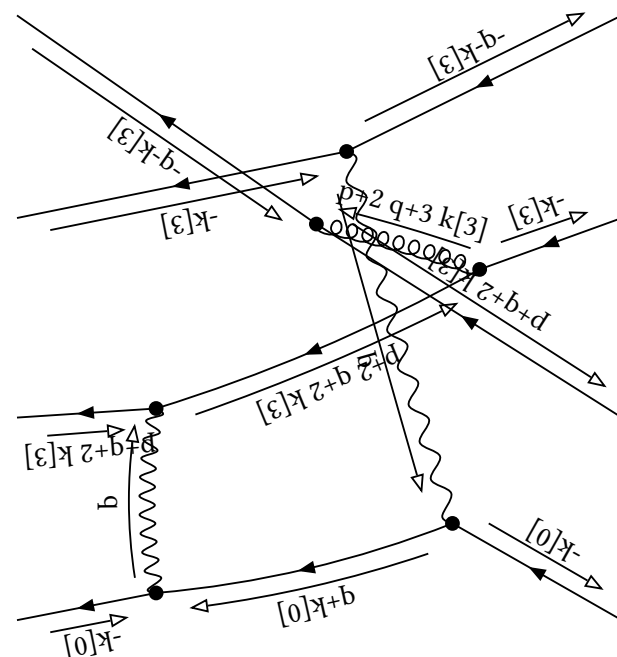


-1+10-13



-1-13-15+16

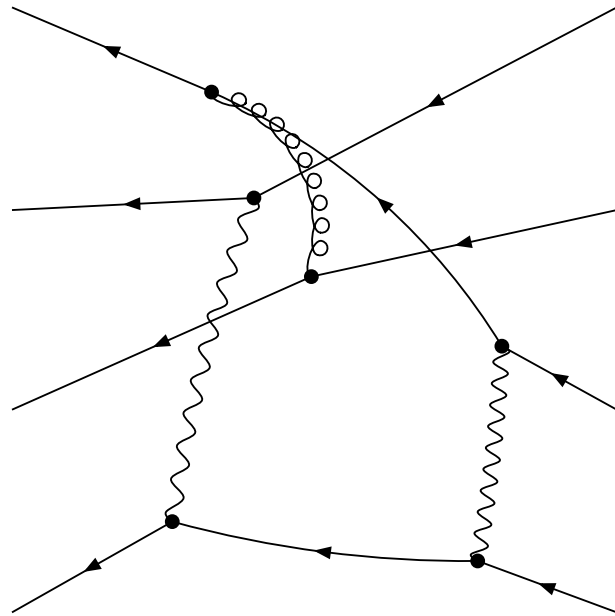
initial

$$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+q+2 \ k[3]]^{-1} \text{prop}[0,p+2 \ q+2 \ k[3]]^{-1} \text{prop}[0,p+2 \ q+3 \ k[3]]^{-1}$$
$$\begin{aligned} & \frac{1}{2} (-\text{dot}[p,q]-\frac{1}{2} \text{dot}[q,q])^{-1} (-\frac{1}{2} \text{dot}[p,p]-2 \text{dot}[p,q]-2 \text{dot}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+2 q+2 k[3]]^{-1} \\ & -\frac{3}{4} (-\text{dot}[p,q]-\frac{1}{2} \text{dot}[q,q])^{-1} (-\frac{1}{2} \text{dot}[p,p]-2 \text{dot}[p,q]-2 \text{dot}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+2 q+3 k[3]]^{-1} \\ & +(-\text{dot}[p,q]-\frac{1}{2} \text{dot}[q,q])^{-1} (-\frac{1}{2} \text{dot}[p,p]-2 \text{dot}[p,q]-2 \text{dot}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,p+q+2 k[3]]^{-1} \text{prop}[0,p+2 q+2 k[3]]^{-1} \\ & -\frac{3}{2} (-\text{dot}[p,q]-\frac{1}{2} \text{dot}[q,q])^{-1} (-\frac{1}{2} \text{dot}[p,p]-2 \text{dot}[p,q]-2 \text{dot}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,p+q+2 k[3]]^{-1} \text{prop}[0,p+2 q+3 k[3]]^{-1} \\ & -\frac{3}{2} (-\text{dot}[p,q]-\frac{1}{2} \text{dot}[q,q])^{-1} (-\frac{1}{2} \text{dot}[p,p]-2 \text{dot}[p,q]-2 \text{dot}[q,q])^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+2 q+2 k[3]]^{-1} \text{prop}[0,p+2 q+3 k[3]]^{-1} \\ & -3 (-\text{dot}[p,q]-\frac{1}{2} \text{dot}[q,q])^{-1} (-\frac{1}{2} \text{dot}[p,p]-2 \text{dot}[p,q]-2 \text{dot}[q,q])^{-1} \text{prop}[0,p+q+2 k[3]]^{-1} \text{prop}[0,p+2 q+2 k[3]]^{-1} \text{prop}[0,p+2 q+3 \\ & k[3]]^{-1} \\ & -\frac{1}{2} (-\text{dot}[p,q]-\frac{1}{2} \text{dot}[q,q])^{-1} (-\frac{1}{2} \text{dot}[p,p]+\text{dot}[p,q]-\frac{1}{2} \text{dot}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+q+2 k[3]]^{-1} \\ & +\frac{3}{4} (-\text{dot}[p,q]-\frac{1}{2} \text{dot}[q,q])^{-1} (-\frac{1}{2} \text{dot}[p,p]+\text{dot}[p,q]-\frac{1}{2} \text{dot}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+2 q+3 k[3]]^{-1} \\ & +\frac{3}{2} (-\text{dot}[p,q]-\frac{1}{2} \text{dot}[q,q])^{-1} (-\frac{1}{2} \text{dot}[p,p]+\text{dot}[p,q]-\frac{1}{2} \text{dot}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,p+q+2 k[3]]^{-1} \text{prop}[0,p+2 q+3 k[3]]^{-1} \\ & -(-\text{dot}[p,q]-\frac{1}{2} \text{dot}[q,q])^{-1} (-\frac{1}{2} \text{dot}[p,p]+\text{dot}[p,q]-\frac{1}{2} \text{dot}[q,q])^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+q+2 k[3]]^{-1} \text{prop}[0,p+2 q+2 k[3]]^{-1} \\ & +\frac{3}{2} (-\text{dot}[p,q]-\frac{1}{2} \text{dot}[q,q])^{-1} (-\frac{1}{2} \text{dot}[p,p]+\text{dot}[p,q]-\frac{1}{2} \text{dot}[q,q])^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+2 q+2 k[3]]^{-1} \text{prop}[0,p+2 q+3 k[3]]^{-1} \\ & +3 (-\text{dot}[p,q]-\frac{1}{2} \text{dot}[q,q])^{-1} (-\frac{1}{2} \text{dot}[p,p]+\text{dot}[p,q]-\frac{1}{2} \text{dot}[q,q])^{-1} \text{prop}[0,p+q+2 k[3]]^{-1} \text{prop}[0,p+2 q+2 k[3]]^{-1} \text{prop}[0,p+2 q+3 \\ & k[3]]^{-1} \end{aligned}$$


final

Denominator:

$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+2 \ k[3]]^{-1} \text{prop}[0,p+q+2 \ k[3]]^{-1} \text{prop}[0,p+q+3 \ k[3]]^{-1}$



-1+8-13-15

embedding 50 [1, 1, 0, -1]

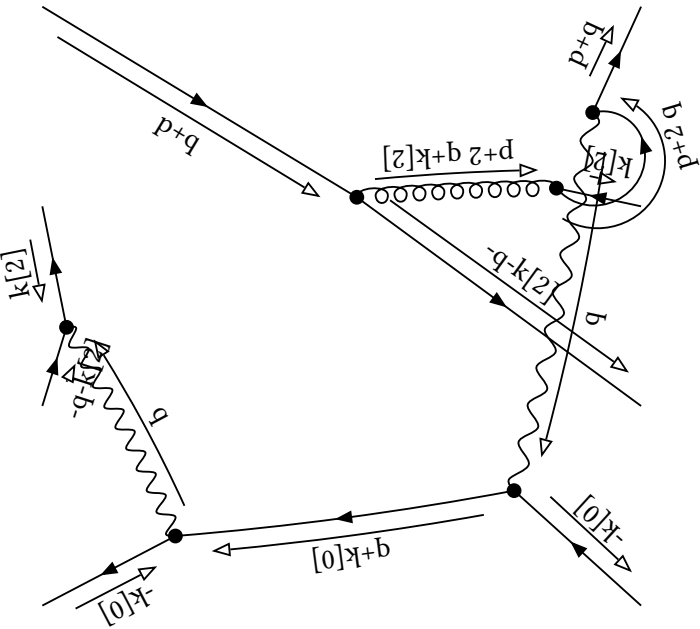
initial

Denominator:

$\text{prop}[\theta,k[2]]^{-1} \text{prop}[\theta,p+q]^{-1} \text{prop}[\theta,q+k[2]]^{-1} \text{prop}[\theta,p+2 \ q]^{-1} \text{prop}[\theta,p+2 \ q+k[2]]^{-1}$

Partial Fractioned Denominator:

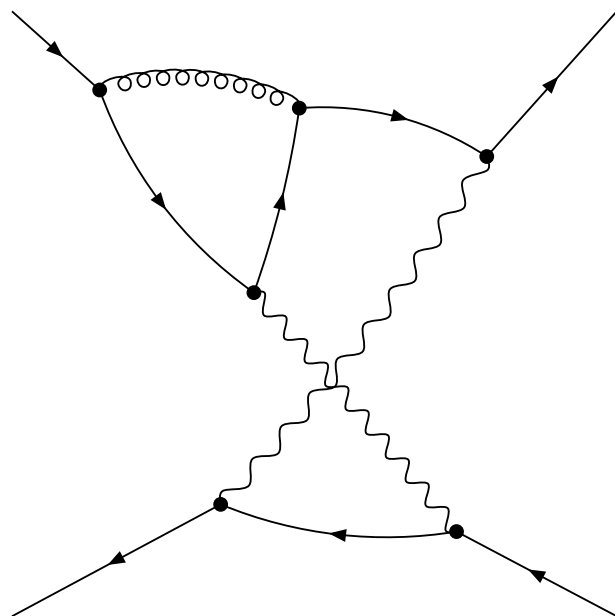
$(\text{dot}[p,p]+2 \ \text{dot}[p,q]+\text{dot}[q,q])^{-1} (\text{dot}[p,p]+4 \ \text{dot}[p,q]+4 \ \text{dot}[q,q])^{-1} \text{prop}[\theta,k[2]]^{-1} \text{prop}[\theta,q+k[2]]^{-1} \text{prop}[\theta,p+2 \ q+k[2]]^{-1}$



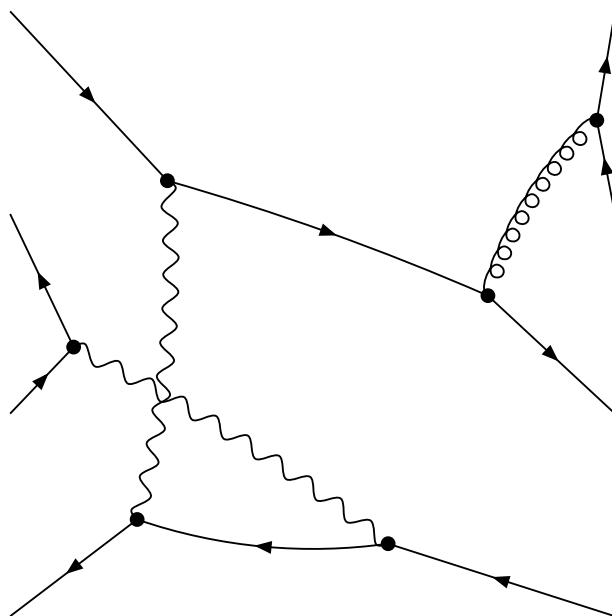
final

Denominator:

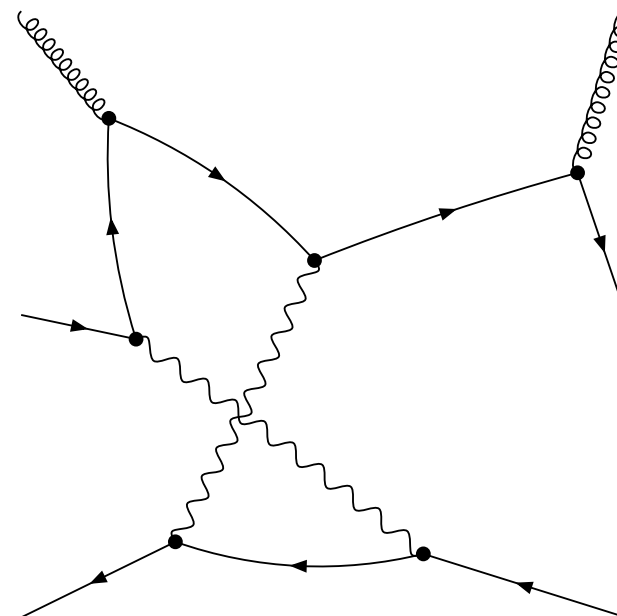
$\text{prop}[0,p]^{-1} \text{prop}[0,k[2]]^{-1} \text{prop}[0,p+q]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,p+q+k[2]]^{-1}$



-1+13



-1-8+10+15



-1-8+16

embedding 51 [1, 1, 0, 0]

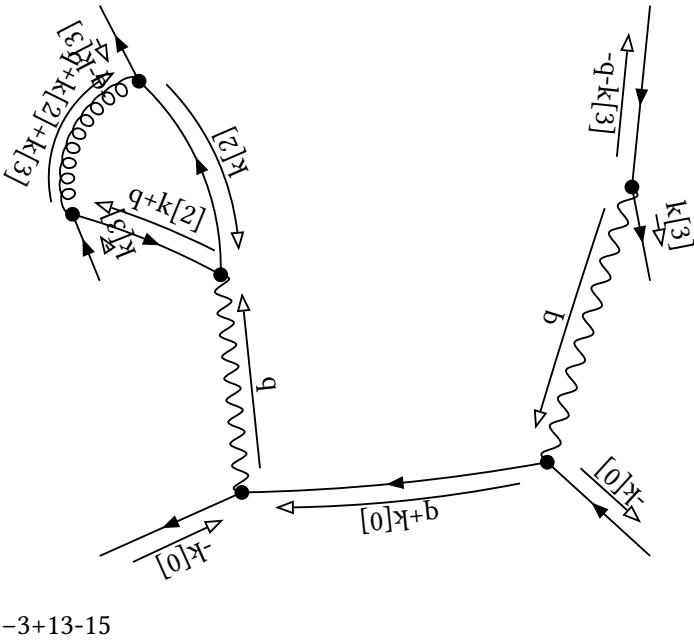
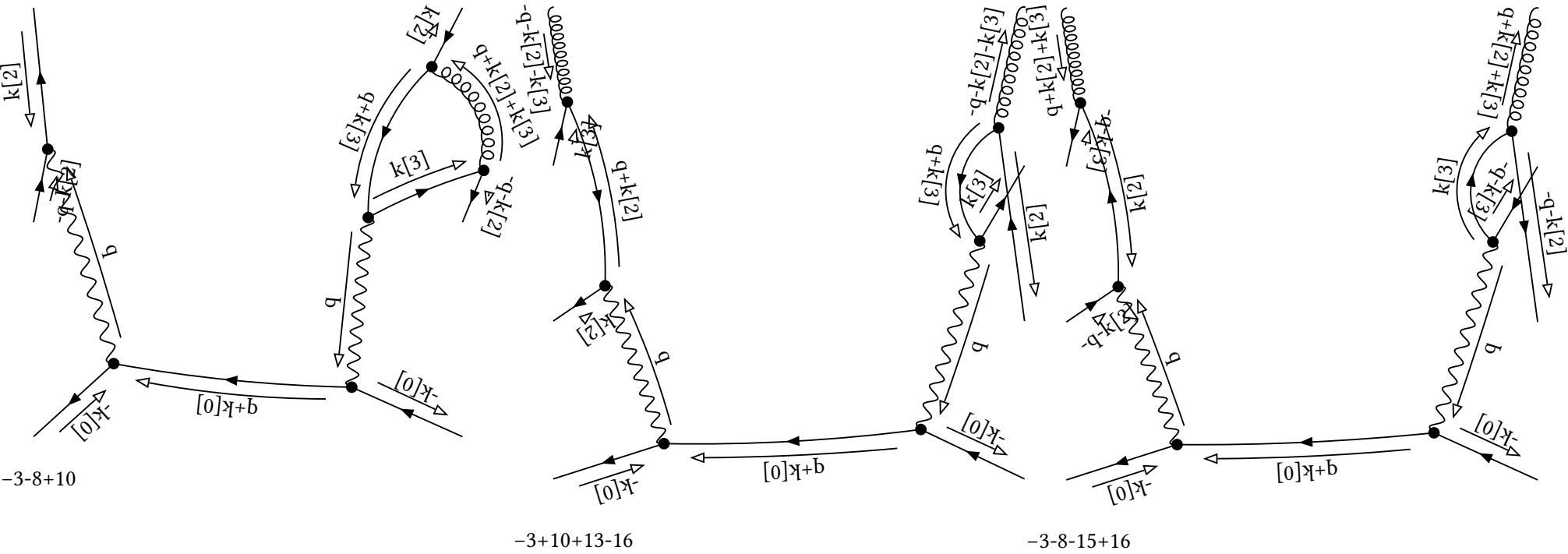
initial

Denominator:

$\text{prop}[0,k[2]]^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,q+k[2]+k[3]]^{-1}$

Partial Fractioned Denominator:

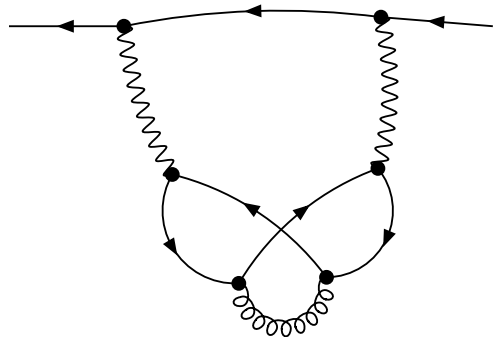
$\text{prop}[0,k[2]]^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,q+k[2]+k[3]]^{-1}$



final

Denominator:

$\text{prop}[0,k[2]]^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,q+k[2]+k[3]]^{-1}$



embedding 52 [1, 1, 0, 1]

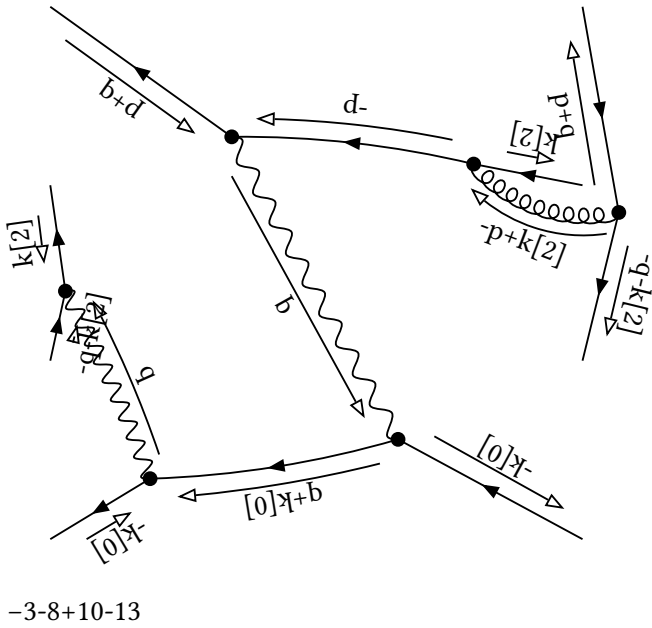
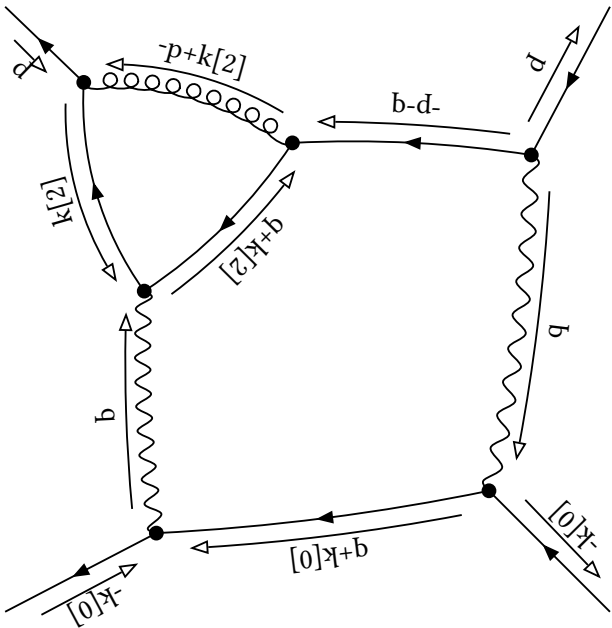
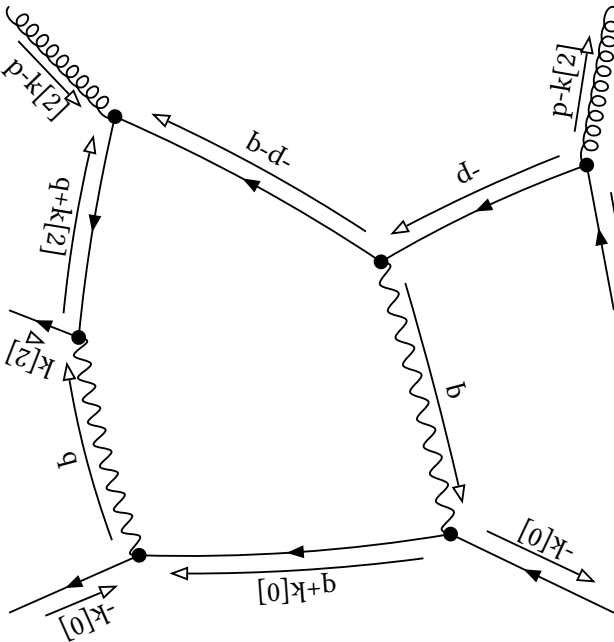
initial

Denominator:

$\text{prop}[0,k[2]]^{-1} \text{prop}[0,-p]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,-p+k[2]]^{-1} \text{prop}[0,-p-q]^{-1}$

Partial Fractioned Denominator:

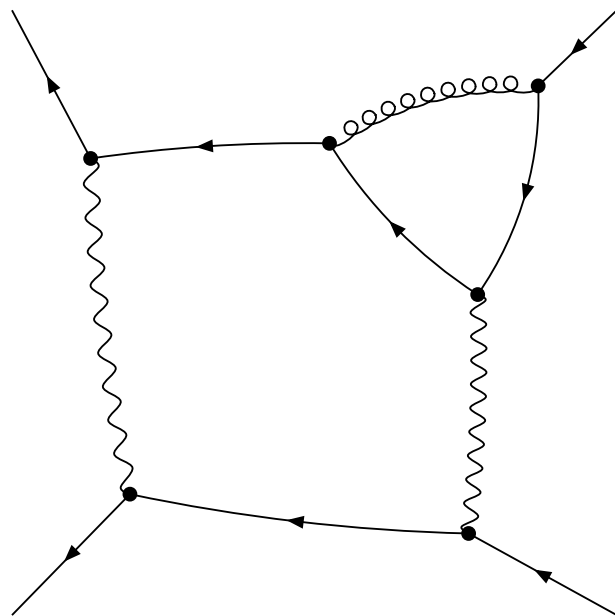
$(\text{dot}[p,p]+2 \text{dot}[p,q]+\text{dot}[q,q])^{-1} \text{prop}[0,k[2]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,-p+k[2]]^{-1} \text{dot}[p,p]^{-1}$



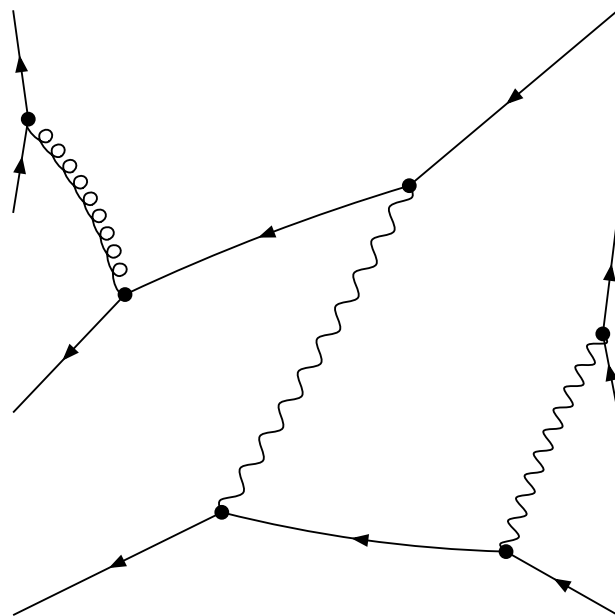
final

Denominator:

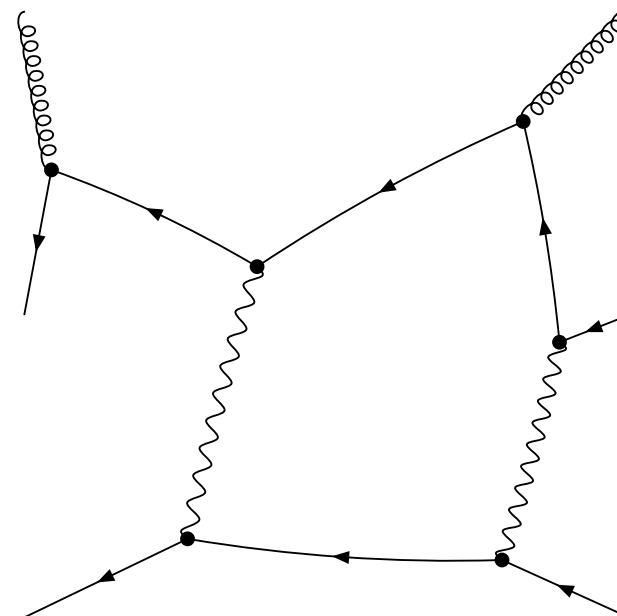
$\text{prop}[0, k[2]]^{-1} \text{prop}[0, -p]^{-1} \text{prop}[0, q+k[2]]^{-1} \text{prop}[0, -p+q]^{-1} \text{prop}[0, -p+q+k[2]]^{-1}$



-1-13



-1+8-10-15



-1+8-16

embedding 53 [1, 1, 0, 2]

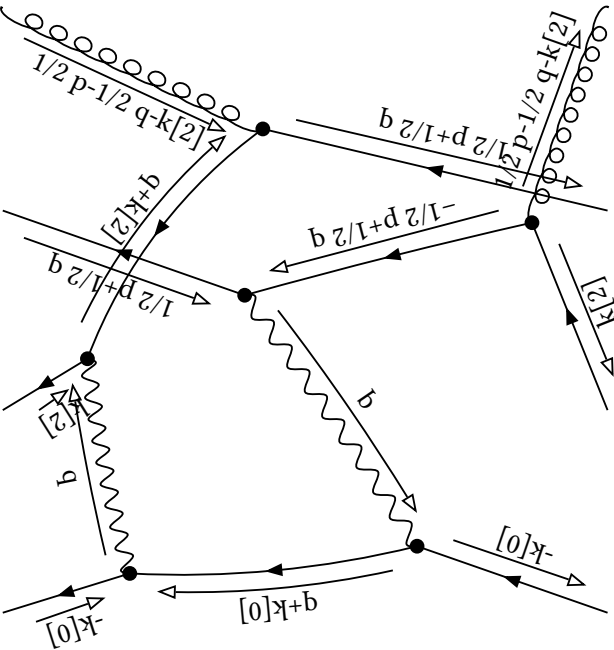
initial

Denominator:

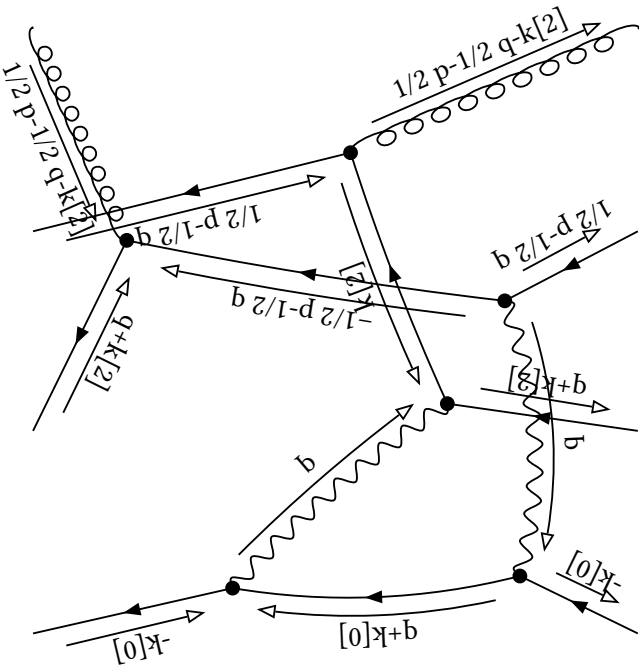
$$\text{prop}[0,k[2]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,-1/2 \, p+1/2 \, q]^{-1} \text{prop}[0,-1/2 \, p-1/2 \, q]^{-1} \text{prop}[0,-1/2 \, p+1/2 \, q+k[2]]^{-1}$$

Partial Fractioned Denominator:

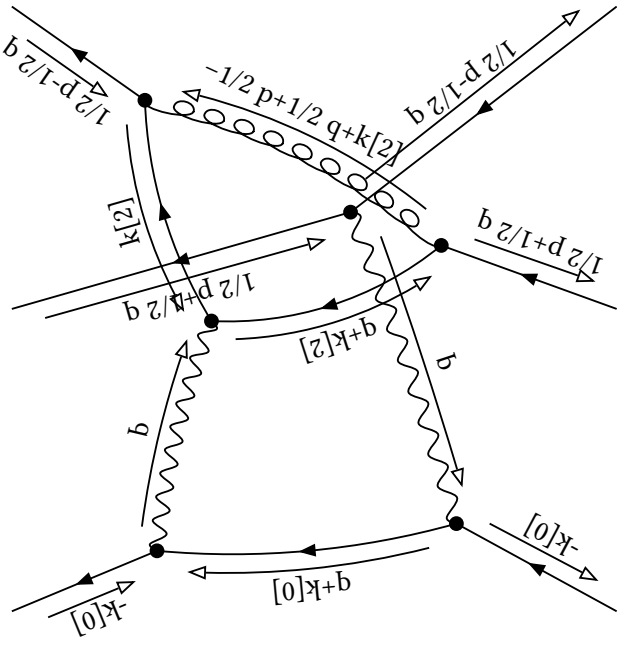
$$(1/4 \, \text{dot}[p,p]-1/2 \, \text{dot}[p,q]+1/4 \, \text{dot}[q,q])^{-1} (1/4 \, \text{dot}[p,p]+1/2 \, \text{dot}[p,q]+1/4 \, \text{dot}[q,q])^{-1} \text{prop}[0,k[2]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,-1/2 \, p+1/2 \, q+k[2]]^{-1}$$



-3+10-13-16



-3+8-15-16



-3-13-15

final

Denominator:

0

embedding 54 [1, 1, 1, -2]

initial

Denominator:

0

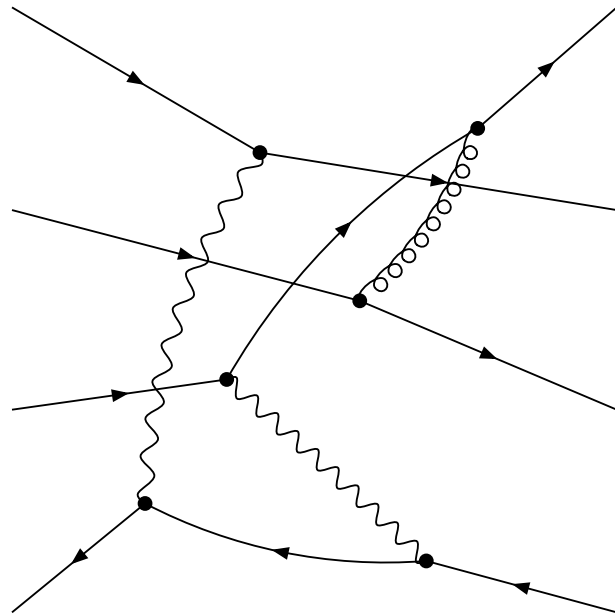
Partial Fractioned Denominator:

0

final

Denominator:

$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+2 \ k[3]]^{-1} \text{prop}[0, -p+q+2 \ k[3]]^{-1} \text{prop}[0, -p+q+3 \ k[3]]^{-1}$



$-1-8+13+15$

embedding 55 [1, 1, 1, -1]

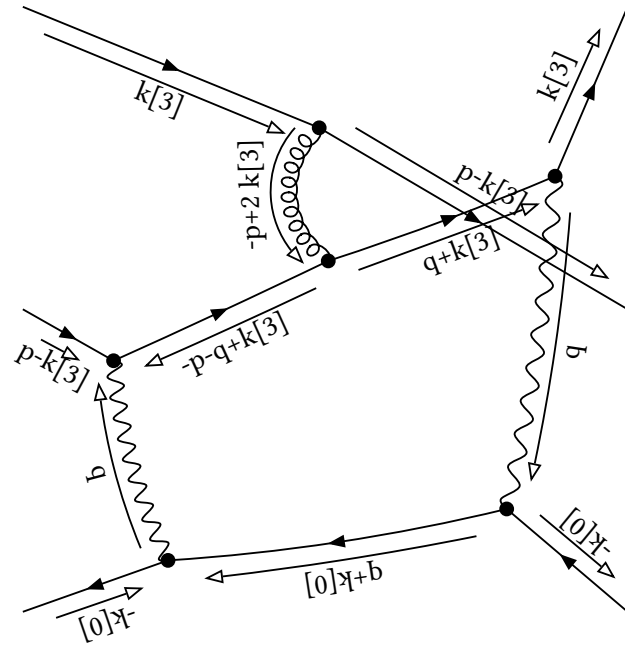
initial

Denominator:

$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+k[3]]^{-1} \text{prop}[0, -p+2 k[3]]^{-1} \text{prop}[0, -p-q+k[3]]^{-1}$$

Partial Fractioned Denominator:

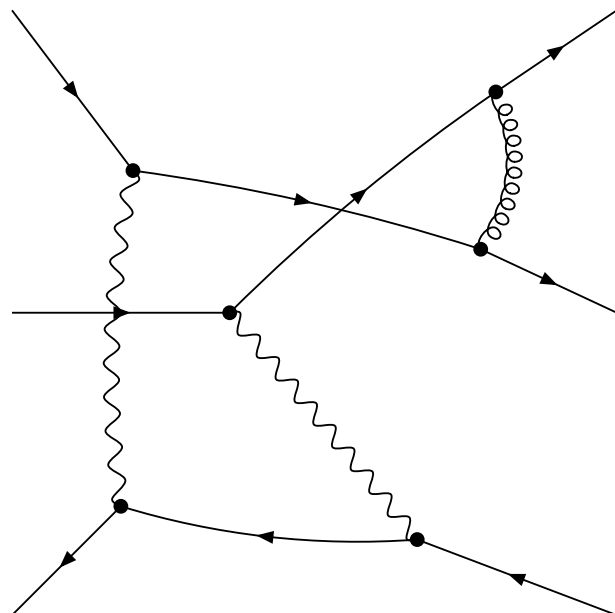
$$\begin{aligned} & 2 (2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} (-\text{dot}[p, p] - 4 \text{dot}[p, q] - 4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+2 k[3]]^{-1} \\ & - (2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} (-\text{dot}[p, p] - 4 \text{dot}[p, q] - 4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-q+k[3]]^{-1} \\ & + 2 (2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} (-\text{dot}[p, p] - 4 \text{dot}[p, q] - 4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -p+2 k[3]]^{-1} \text{prop}[0, -p-q+k[3]]^{-1} \\ & + 2 (2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} (-\text{dot}[p, p] - 4 \text{dot}[p, q] - 4 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+k[3]]^{-1} \text{prop}[0, -p+2 k[3]]^{-1} \\ & - (2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} (-\text{dot}[p, p] - 4 \text{dot}[p, q] - 4 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+k[3]]^{-1} \text{prop}[0, -p-q+k[3]]^{-1} \\ & + 2 (2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} (-\text{dot}[p, p] - 4 \text{dot}[p, q] - 4 \text{dot}[q, q])^{-1} \text{prop}[0, -p+k[3]]^{-1} \text{prop}[0, -p+2 k[3]]^{-1} \text{prop}[0, -p-q+k[3]]^{-1} \\ & - (2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & + 2 (2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+2 k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & - (2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -p+k[3]]^{-1} \text{prop}[0, -p-q+k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & + 2 (2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -p+2 k[3]]^{-1} \text{prop}[0, -p-q+k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & + 2 (2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+k[3]]^{-1} \text{prop}[0, -p+2 k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & + 2 (2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} \text{prop}[0, -p+k[3]]^{-1} \text{prop}[0, -p+2 k[3]]^{-1} \text{prop}[0, -p-q+k[3]]^{-1} \text{dot}[p, p]^{-1} \end{aligned}$$



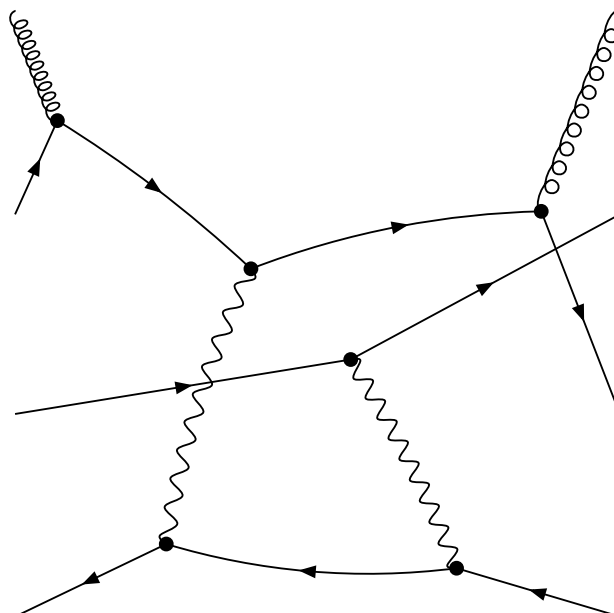
final

Denominator:

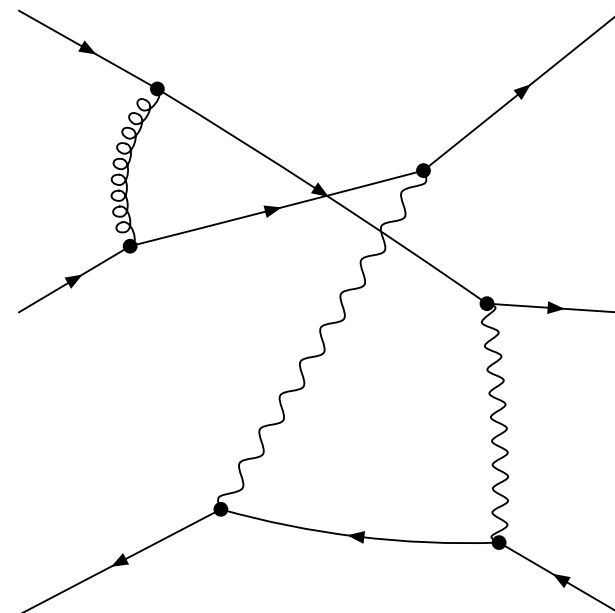
$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+k[3]]^{-1} \text{prop}[0, -p+q+k[3]]^{-1} \text{prop}[0, -p+q+2 k[3]]^{-1}$$



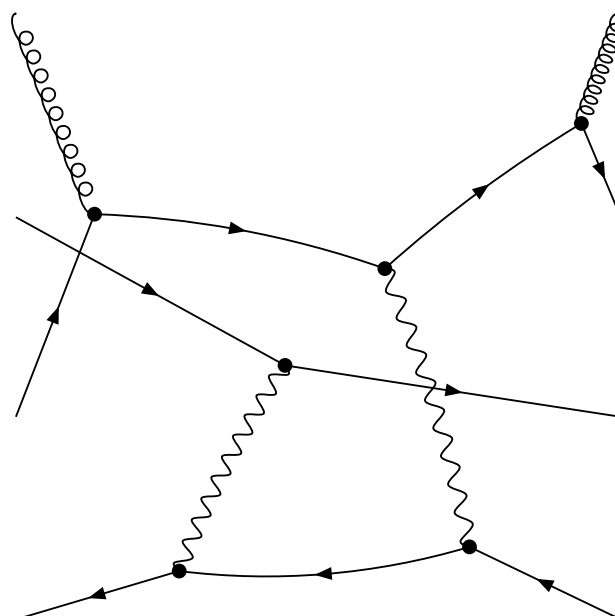
-1-8+15



-1-8-10+16



-1-10+13



-1+13+15-16

embedding 56 [1, 1, 1, 0]

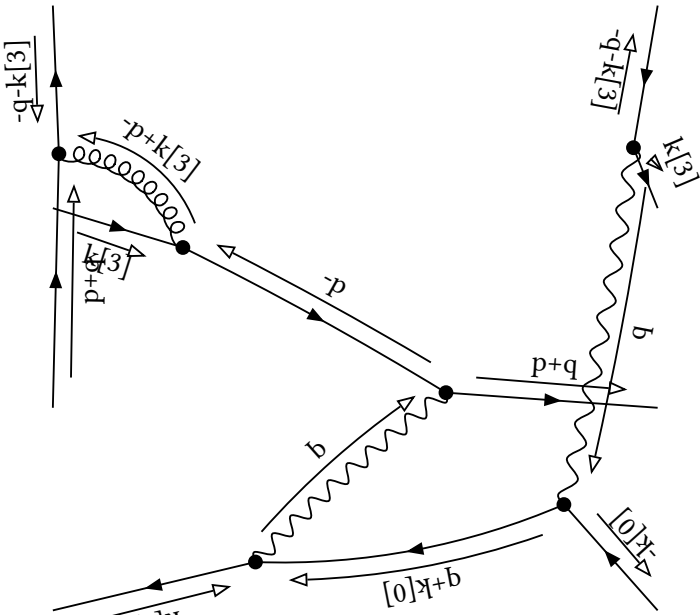
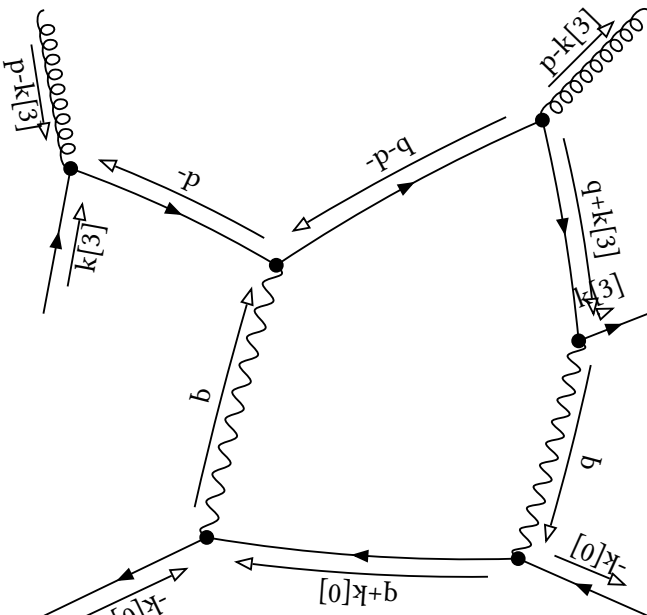
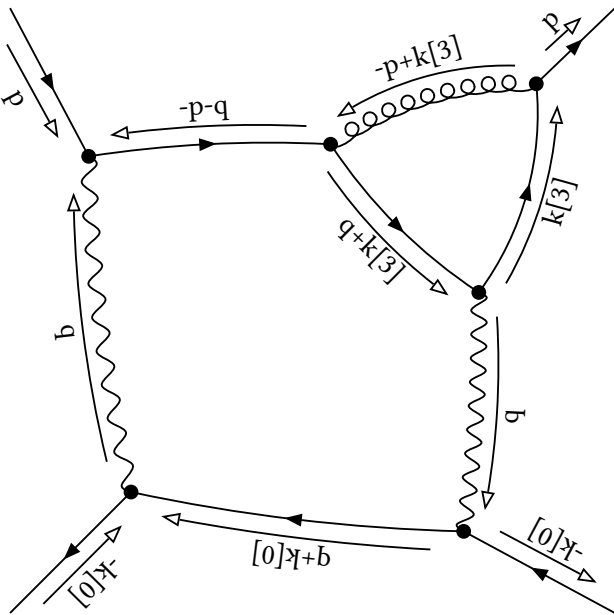
initial

Denominator:

$\text{prop}[0,k[3]]^{-1} \text{prop}[0,-p]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-p+k[3]]^{-1} \text{prop}[0,-p-q]^{-1}$

Partial Fractioned Denominator:

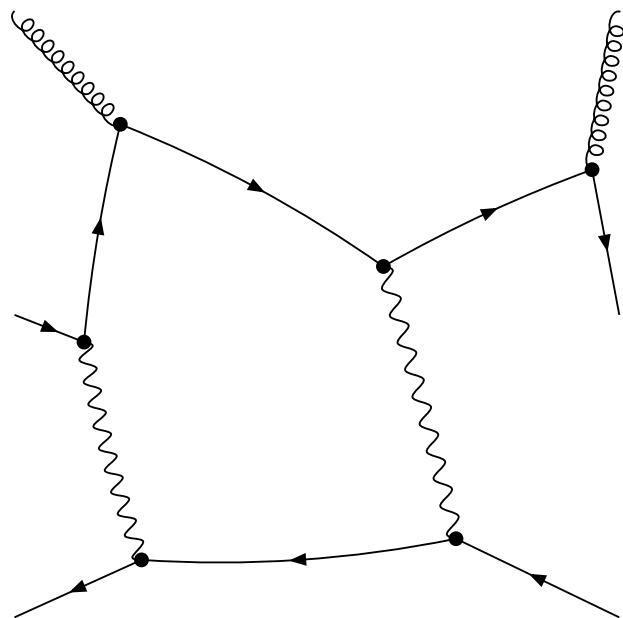
$(\text{dot}[p,p]+2 \text{dot}[p,q]+\text{dot}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-p+k[3]]^{-1} \text{dot}[p,p]^{-1}$



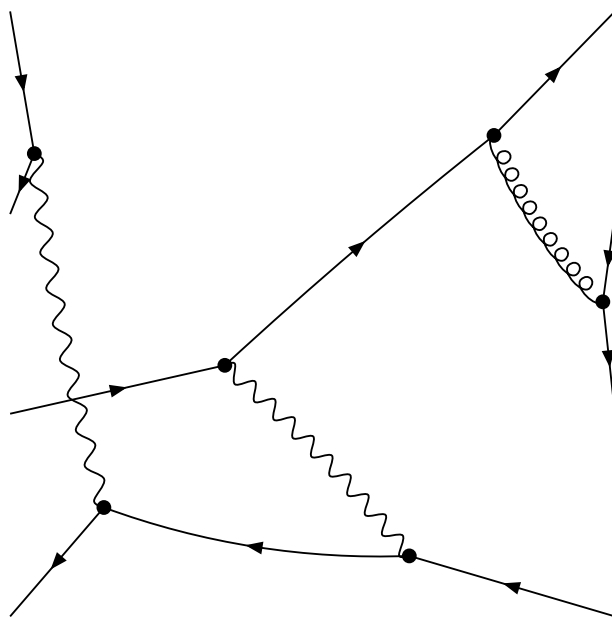
final

Denominator:

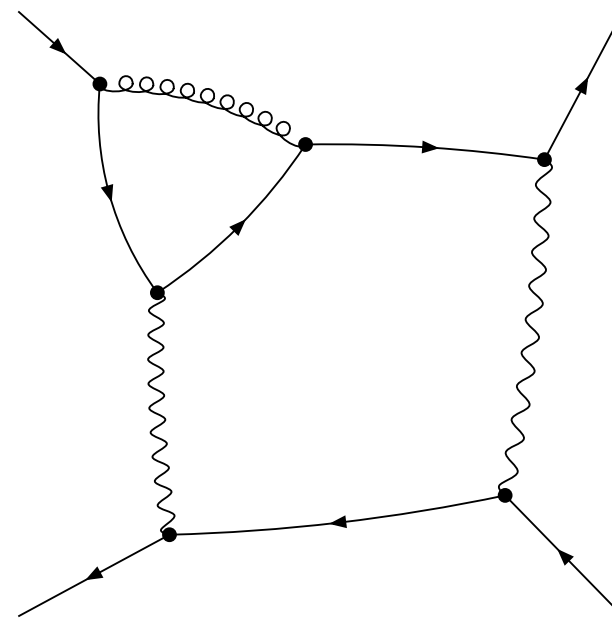
$$\text{prop}[0,k[3]]^{-1} \text{prop}[0,-p]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-p+q]^{-1} \text{prop}[0,-p+q+k[3]]^{-1}$$



$$-1+15-16$$



$$-1-8-13+15$$



$$-1-10$$

embedding 57 [1, 1, 1, 1]

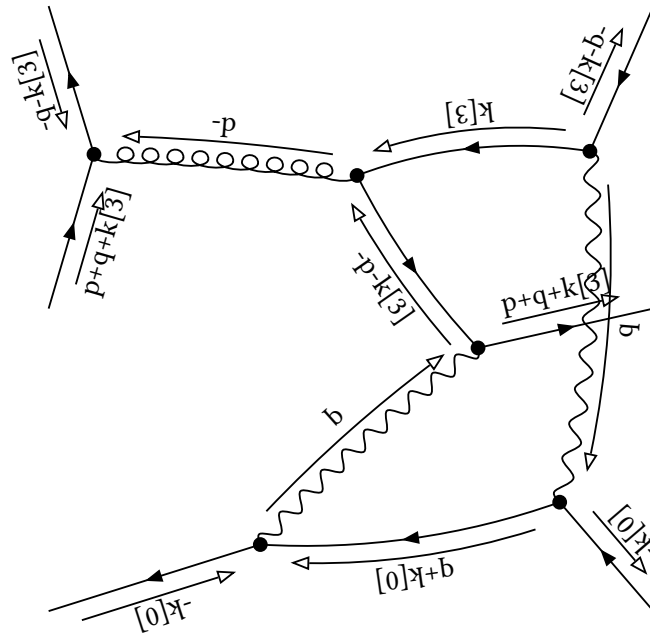
initial

Denominator:

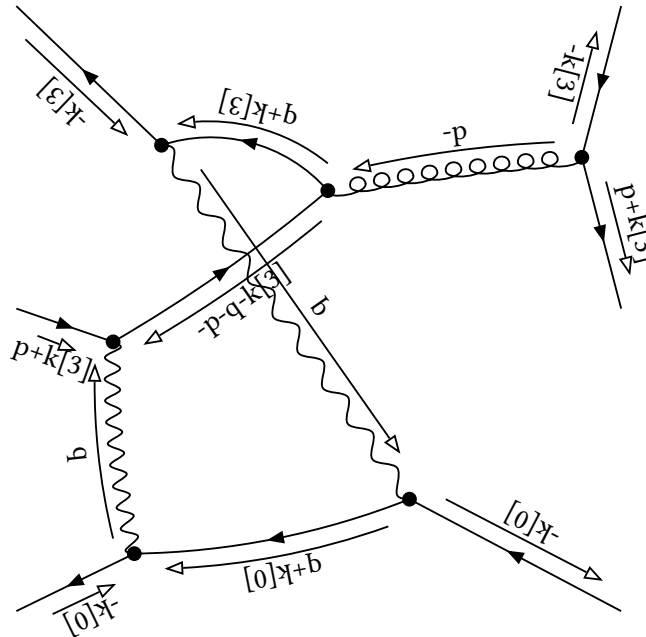
$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, -p]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-k[3]]^{-1} \text{prop}[0, -p-q-k[3]]^{-1}$$

Partial Fractioned Denominator:

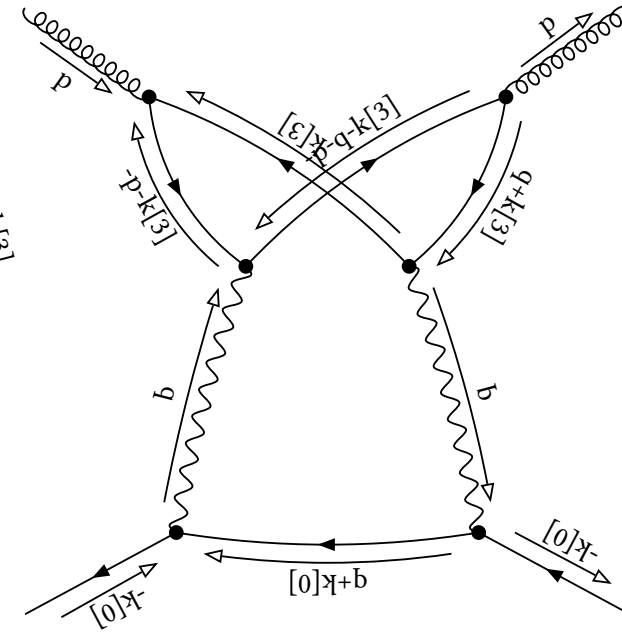
$$\begin{aligned} & 1/2 \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-k[3]]^{-1} \text{dot}[p, p]^{-1} \text{dot}[p, q]^{-1} \\ & -1/2 \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-q-k[3]]^{-1} \text{dot}[p, p]^{-1} \text{dot}[p, q]^{-1} \\ & -1/2 \text{prop}[0, k[3]]^{-1} \text{prop}[0, -p-k[3]]^{-1} \text{prop}[0, -p-q-k[3]]^{-1} \text{dot}[p, p]^{-1} \text{dot}[p, q]^{-1} \\ & +1/2 \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-k[3]]^{-1} \text{prop}[0, -p-q-k[3]]^{-1} \text{dot}[p, p]^{-1} \text{dot}[p, q]^{-1} \end{aligned}$$



-3-10-15



-3-8-13

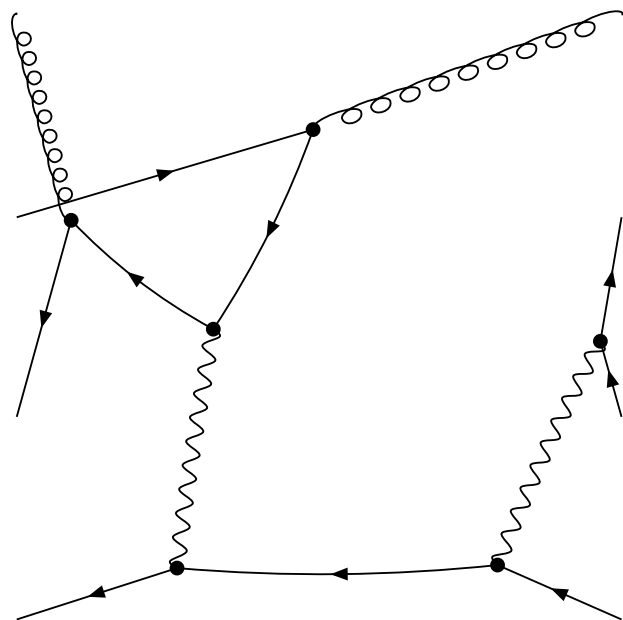


-3-16

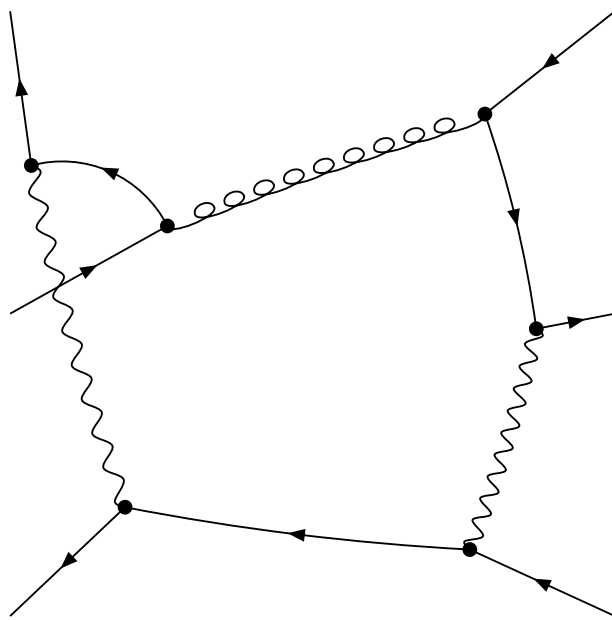
final

Denominator:

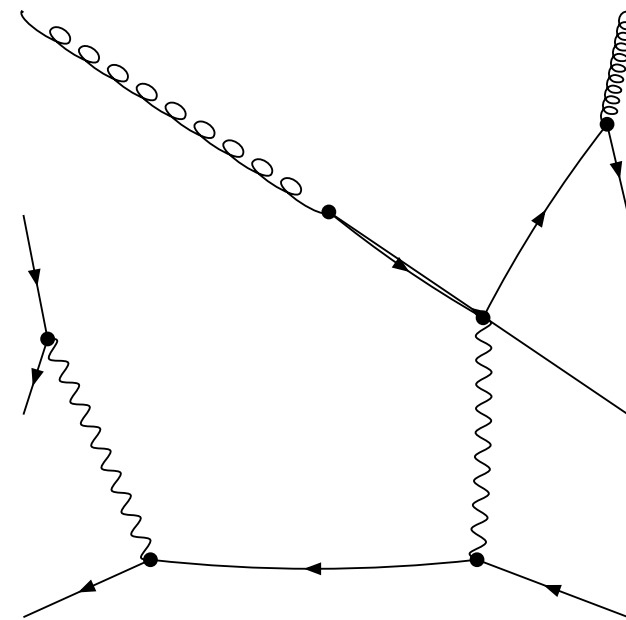
$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-p+q]^{-1} \text{prop}[0,-p-k[3]]^{-1} \text{prop}[0,-p+q-k[3]]^{-1}$



-1+8-10-16



-1-10-13



-1-13+15-16

embedding 58 [1, 1, 1, 2]

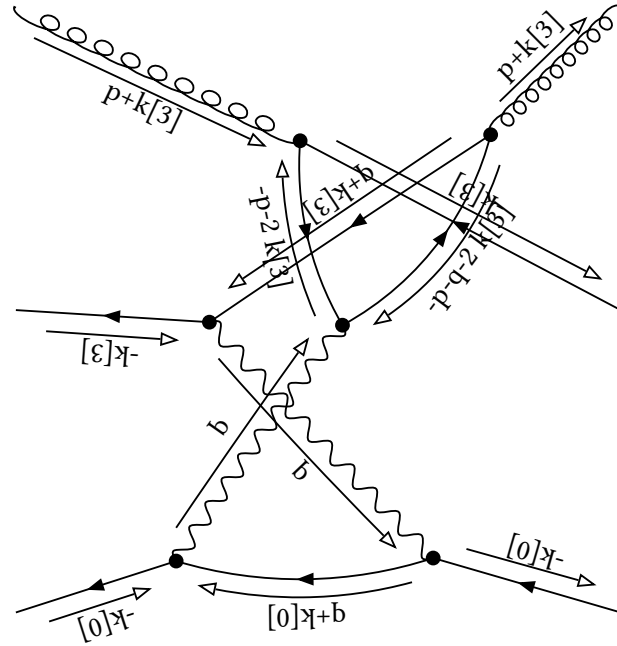
initial

Denominator:

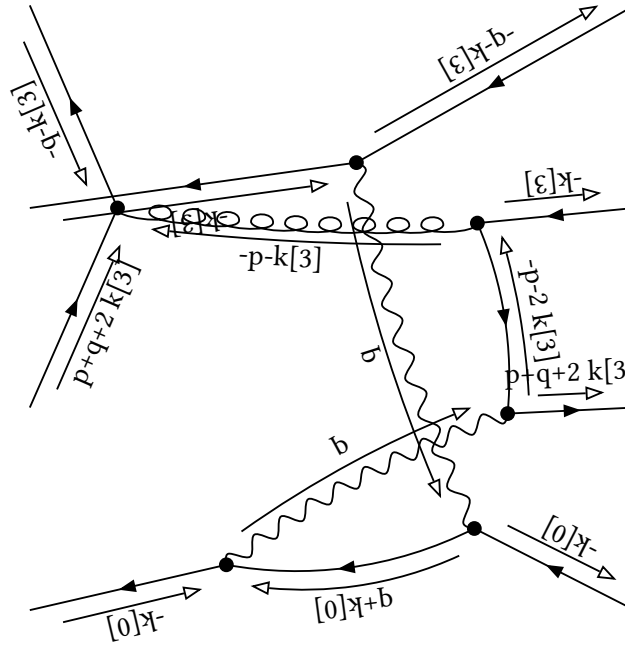
$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-k[3]]^{-1} \text{prop}[0, -p-2 k[3]]^{-1} \text{prop}[0, -p-q-2 k[3]]^{-1}$$

Partial Fractioned Denominator:

$$\begin{aligned} & -1/4 (-\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] - \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-k[3]]^{-1} \\ & + 1/2 (-\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] - \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-q-2 k[3]]^{-1} \\ & + 1/2 (-\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] - \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -p-k[3]]^{-1} \text{prop}[0, -p-q-2 k[3]]^{-1} \\ & + 1/2 (-\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] - \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-k[3]]^{-1} \text{prop}[0, -p-2 k[3]]^{-1} \\ & - (-\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] - \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-2 k[3]]^{-1} \text{prop}[0, -p-q-2 k[3]]^{-1} \\ & - (-\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] - \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, -p-k[3]]^{-1} \text{prop}[0, -p-2 k[3]]^{-1} \text{prop}[0, -p-q-2 k[3]]^{-1} \\ & + 1/2 (-\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & - (-\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-2 k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & - (-\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -p-k[3]]^{-1} \text{prop}[0, -p-q-2 k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & + 2 (-\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -p-2 k[3]]^{-1} \text{prop}[0, -p-q-2 k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & - (-\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-k[3]]^{-1} \text{prop}[0, -p-2 k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & + 2 (-\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, -p-k[3]]^{-1} \text{prop}[0, -p-2 k[3]]^{-1} \text{prop}[0, -p-q-2 k[3]]^{-1} \text{dot}[p, p]^{-1} \end{aligned}$$



-3-13-16



-3-10-13-15

final

Denominator:

0

embedding 59 [1, 1, 2, -1]

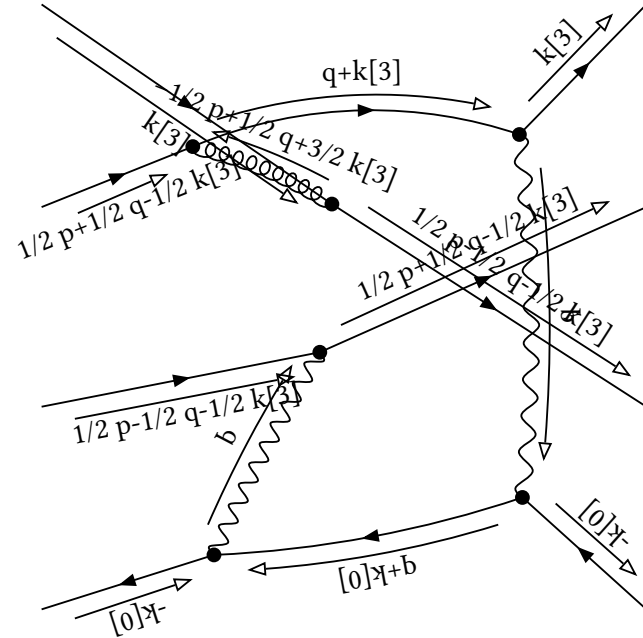
initial

Denominator:

$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q+1/2 k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q+3/2 k[3]]^{-1} \text{prop}[0, -1/2 p-1/2 q+1/2 k[3]]^{-1}$$

Partial Fractioned Denominator:

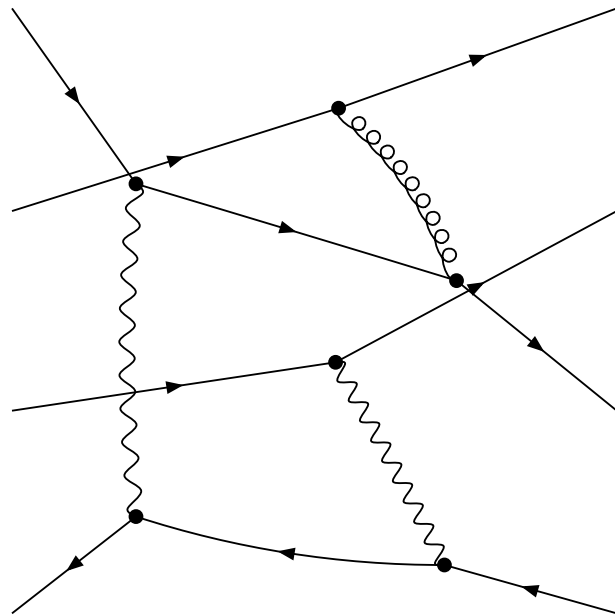
$$\begin{aligned} & 6 (2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q+3/2 k[3]]^{-1} \\ & - 2 (2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p-1/2 q+1/2 k[3]]^{-1} \\ & + 3 (2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q+3/2 k[3]]^{-1} \text{prop}[0, -1/2 p-1/2 q+1/2 k[3]]^{-1} \\ & + 3 (2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q+1/2 k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q+3/2 k[3]]^{-1} \\ & - (2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q+1/2 k[3]]^{-1} \text{prop}[0, -1/2 p-1/2 q+1/2 k[3]]^{-1} \\ & + 3/2 (2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, -1/2 p+1/2 q+1/2 k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q+3/2 k[3]]^{-1} \text{prop}[0, -1/2 p-1/2 q+1/2 k[3]]^{-1} \\ & + 2 (2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q+1/2 k[3]]^{-1} \\ & - 6 (2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q+3/2 k[3]]^{-1} \\ & + (2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q+1/2 k[3]]^{-1} \text{prop}[0, -1/2 p-1/2 q+1/2 k[3]]^{-1} \\ & - 3 (2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q+3/2 k[3]]^{-1} \text{prop}[0, -1/2 p-1/2 q+1/2 k[3]]^{-1} \\ & - 3 (2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q+1/2 k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q+3/2 k[3]]^{-1} \\ & - 3/2 (2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] + \text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, -1/2 p+1/2 q+1/2 k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q+3/2 k[3]]^{-1} \text{prop}[0, -1/2 p-1/2 q+1/2 k[3]]^{-1} \end{aligned}$$



final

Denominator:

$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-1/2 \ p+1/2 \ k[3]]^{-1} \text{prop}[0,-1/2 \ p+q+1/2 \ k[3]]^{-1} \text{prop}[0,-1/2 \ p+q+3/2 \ k[3]]^{-1}$



-1-8-10+15

embedding 60 [1, 1, 2, 0]

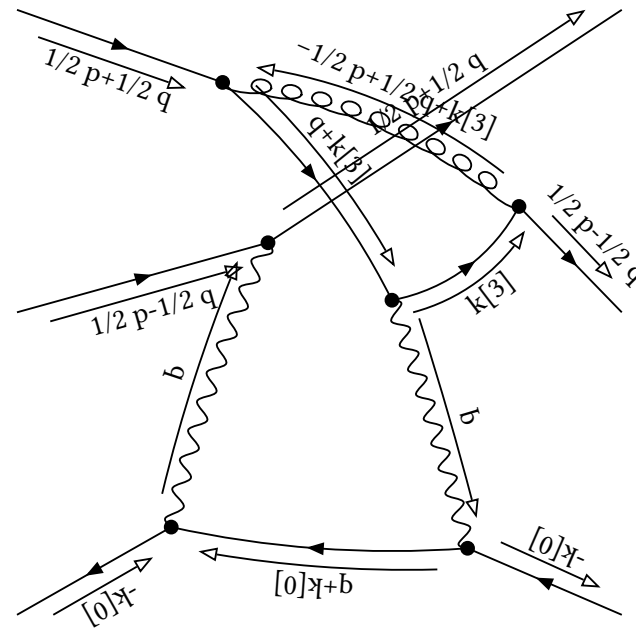
initial

Denominator:

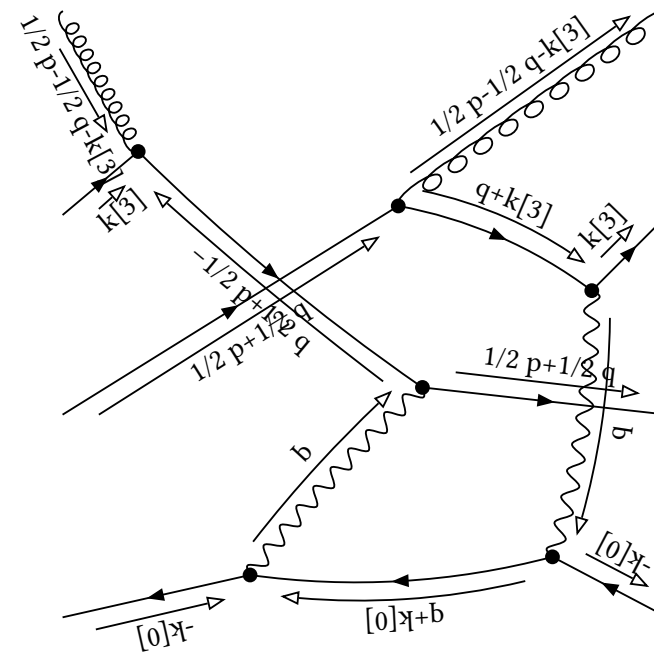
$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q]^{-1} \text{prop}[0, -1/2 p-1/2 q]^{-1} \text{prop}[0, -1/2 p+1/2 q+k[3]]^{-1}$$

Partial Fractioned Denominator:

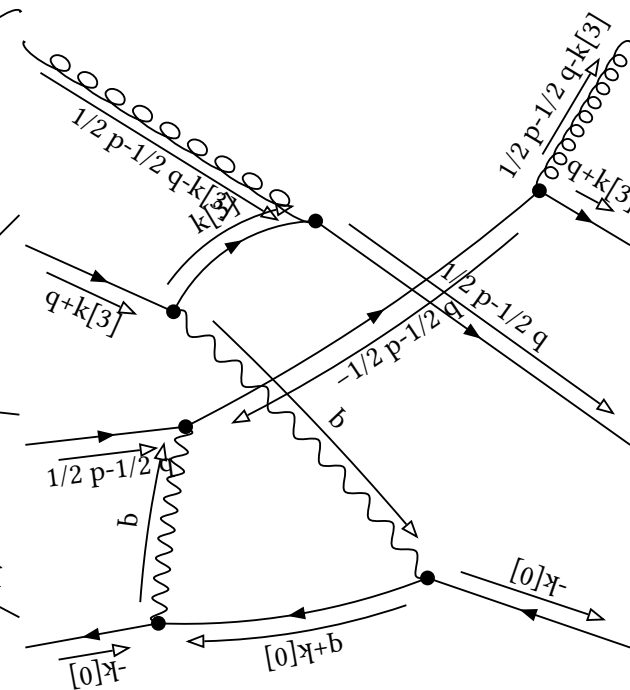
$$(1/4 \text{dot}[p, p] - 1/2 \text{dot}[p, q] + 1/4 \text{dot}[q, q])^{-1} (1/4 \text{dot}[p, p] + 1/2 \text{dot}[p, q] + 1/4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q+k[3]]^{-1}$$



-3-8-10



-3-10+13-16



-3-8+15-16

final

Denominator:

0

embedding 61 [1, 1, 2, 1]

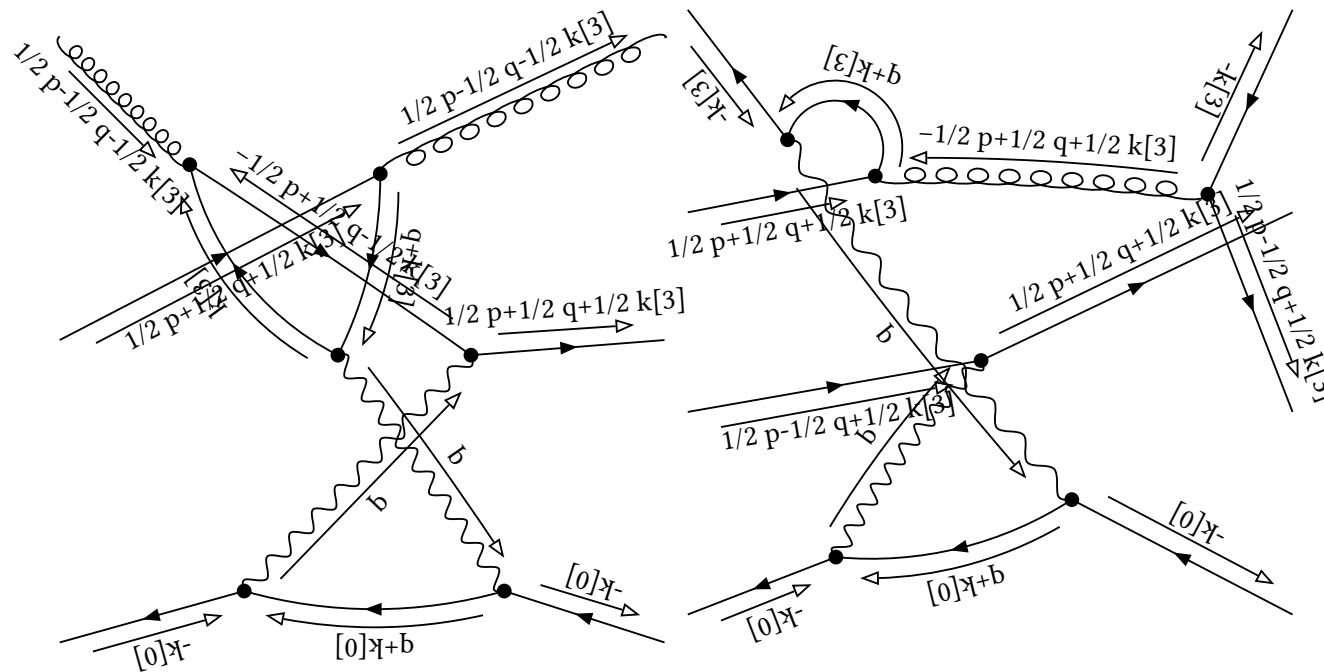
initial

Denominator:

$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q+1/2 k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q-1/2 k[3]]^{-1} \text{prop}[0, -1/2 p-1/2 q-1/2 k[3]]^{-1}$$

Partial Fractioned Denominator:

$$\begin{aligned} & -2 (-2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] - \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q+1/2 k[3]]^{-1} \\ & -2 (-2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] - \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q-1/2 k[3]]^{-1} \\ & + (-2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] - \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q+1/2 k[3]]^{-1} \text{prop}[0, -1/2 p-1/2 q-1/2 k[3]]^{-1} \\ & + (-2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] - \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q-1/2 k[3]]^{-1} \text{prop}[0, -1/2 p-1/2 q-1/2 k[3]]^{-1} \\ & + (-2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] - \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q+1/2 k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q-1/2 k[3]]^{-1} \\ & -1/2 (-2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] - \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, -1/2 p+1/2 q+1/2 k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q-1/2 k[3]]^{-1} \\ & \text{prop}[0, -1/2 p-1/2 q-1/2 k[3]]^{-1} \\ & +4 (-2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q+1/2 k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & +4 (-2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p-1/2 q-1/2 k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & -2 (-2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q+1/2 k[3]]^{-1} \text{prop}[0, -1/2 p-1/2 q-1/2 k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & -2 (-2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q+1/2 k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q-1/2 k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & -2 (-2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q-1/2 k[3]]^{-1} \text{prop}[0, -1/2 p-1/2 q-1/2 k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & + (-2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} \text{prop}[0, -1/2 p+1/2 q+1/2 k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q-1/2 k[3]]^{-1} \text{prop}[0, -1/2 p-1/2 q-1/2 k[3]]^{-1} \text{dot}[p, p]^{-1} \end{aligned}$$



-3-10-16

-3-8-10-13

final

Denominator:

0

embedding 62 [1, 1, 2, 2]

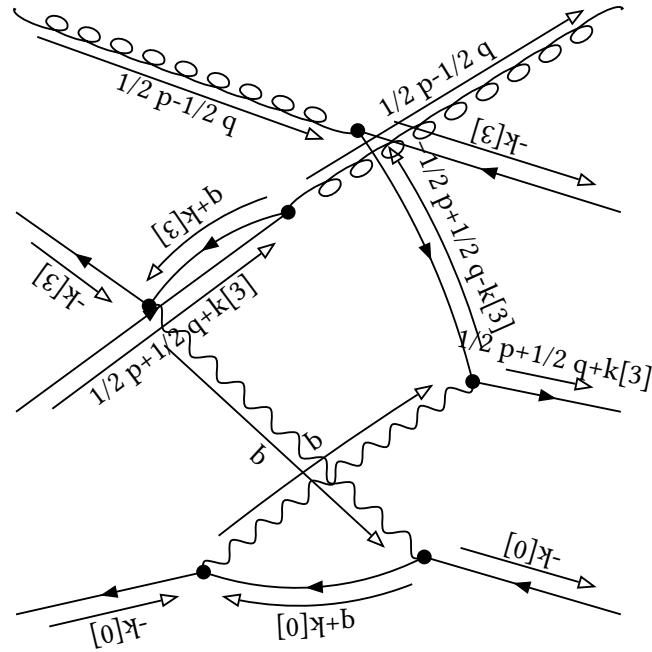
initial

Denominator:

$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q]^{-1} \text{prop}[0, -1/2 p+1/2 q-k[3]]^{-1} \text{prop}[0, -1/2 p-1/2 q-k[3]]^{-1}$$

Partial Fractioned Denominator:

$$\begin{aligned} & -(-\text{dot}[p, q]+\text{dot}[q, q])^{-1} (1/4 \text{dot}[p, p]-1/2 \text{dot}[p, q]+1/4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q-k[3]]^{-1} \\ & +(-\text{dot}[p, q]+\text{dot}[q, q])^{-1} (1/4 \text{dot}[p, p]-1/2 \text{dot}[p, q]+1/4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p-1/2 q-k[3]]^{-1} \\ & +(-\text{dot}[p, q]+\text{dot}[q, q])^{-1} (1/4 \text{dot}[p, p]-1/2 \text{dot}[p, q]+1/4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q-k[3]]^{-1} \text{prop}[0, -1/2 p-1/2 q-k[3]]^{-1} \\ & -(-\text{dot}[p, q]+\text{dot}[q, q])^{-1} (1/4 \text{dot}[p, p]-1/2 \text{dot}[p, q]+1/4 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 q-k[3]]^{-1} \text{prop}[0, -1/2 p-1/2 q-k[3]]^{-1} \end{aligned}$$



-3-10-13-16

final

Denominator:

0

embedding 63 [1, 2, -1, 0]

initial

Denominator:

0

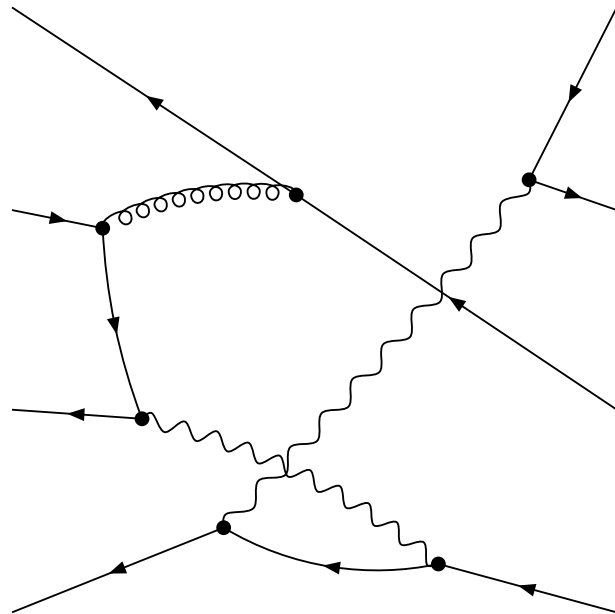
Partial Fractioned Denominator:

0

final

Denominator:

$\text{prop}[0,k[3]]^{-1} \text{prop}[0,p+q]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+2\ q]^{-1} \text{prop}[0,p+2\ q+k[3]]^{-1}$



$-1+10+13-15$

embedding 64 [1, 2, -1, 1]

initial

Denominator:

0

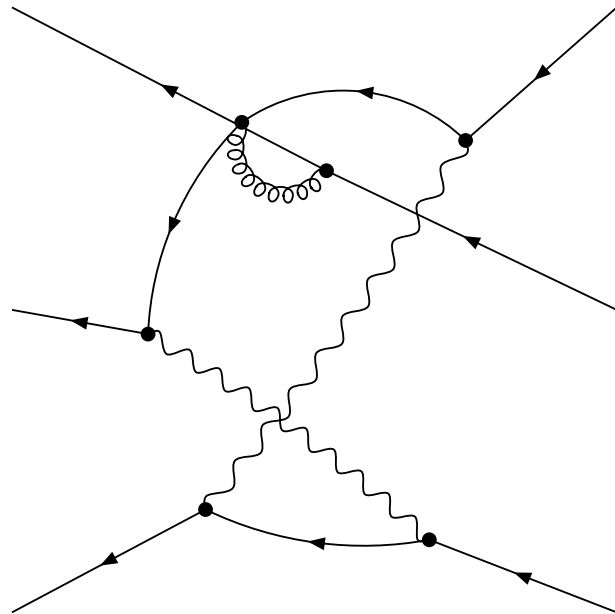
Partial Fractioned Denominator:

0

final

Denominator:

$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+q+k[3]]^{-1} \text{prop}[0,p+2 \ q+k[3]]^{-1} \text{prop}[0,p+2 \ q+2 \ k[3]]^{-1}$



-1+10-15

embedding 65 [1, 2, -1, 2]

initial

Denominator:

0

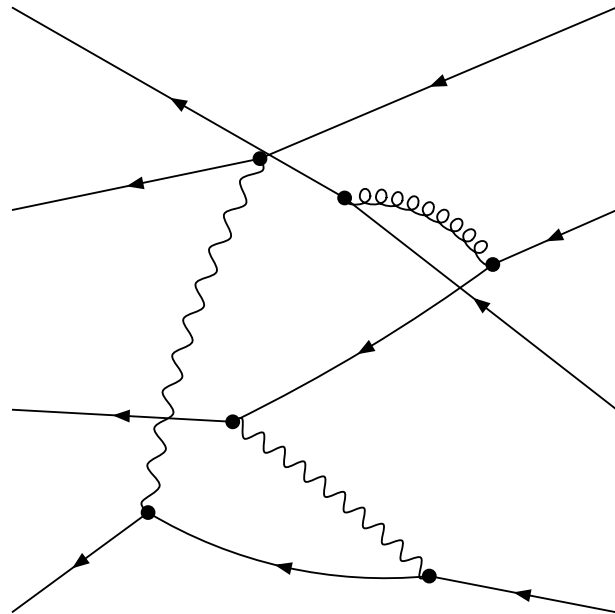
Partial Fractioned Denominator:

0

final

Denominator:

$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+q+2 \ k[3]]^{-1} \text{prop}[0,p+2 \ q+2 \ k[3]]^{-1} \text{prop}[0,p+2 \ q+3 \ k[3]]^{-1}$



-1+10-13-15

embedding 66 [1, 2, 0, -1]

initial

Denominator:

0

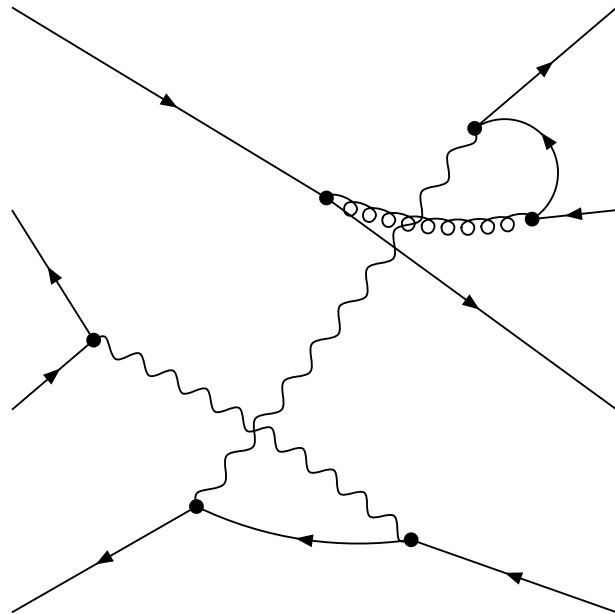
Partial Fractioned Denominator:

0

final

Denominator:

$\text{prop}[0,k[2]]^{-1} \text{prop}[0,p+q]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,p+2\ q]^{-1} \text{prop}[0,p+2\ q+k[2]]^{-1}$



$-1-8+10+13$

embedding 67 [1, 2, 0, 0]

initial

Denominator:

0

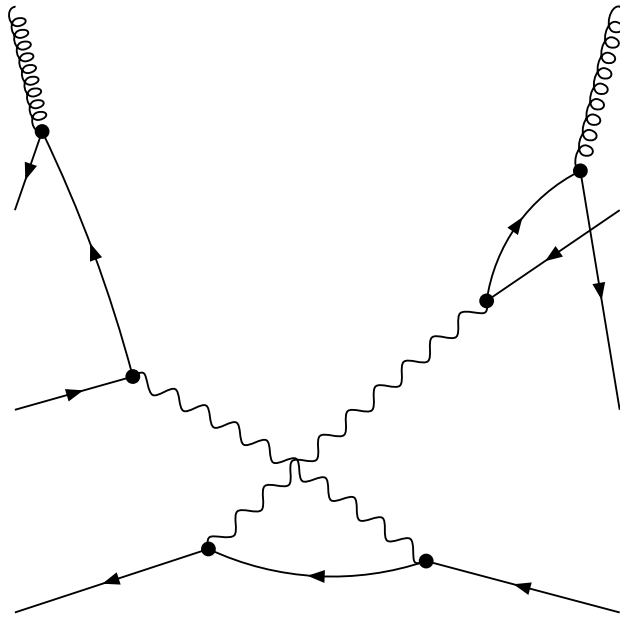
Partial Fractioned Denominator:

0

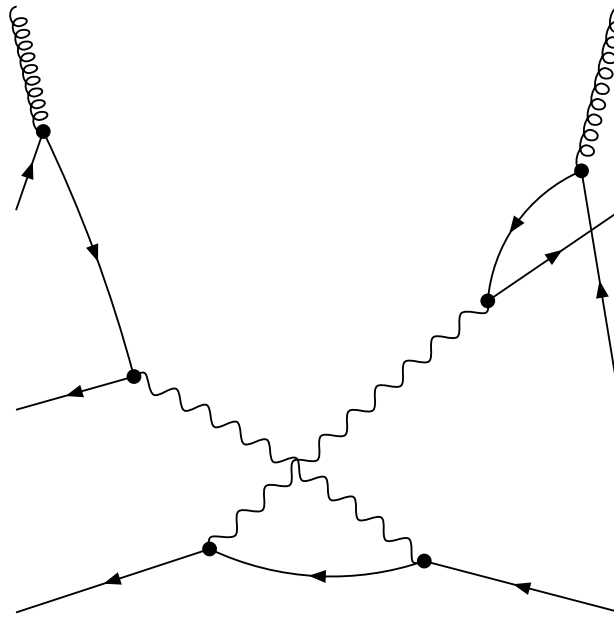
final

Denominator:

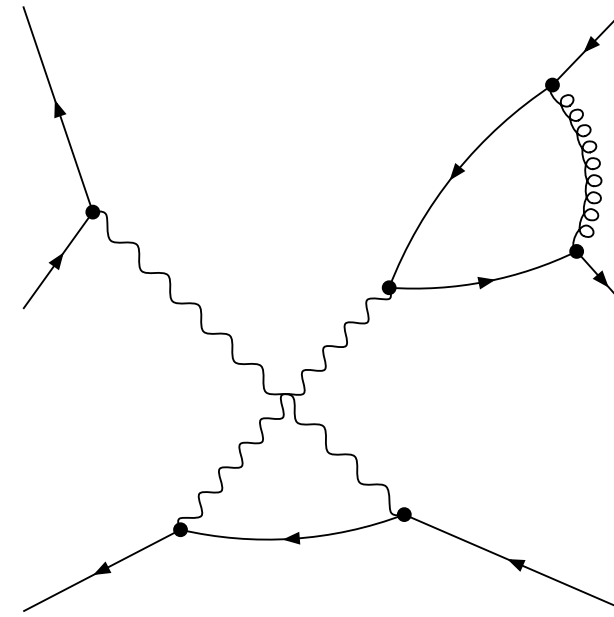
$$\text{prop}[0,k[2]]^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,q+k[2]+k[3]]^{-1}$$



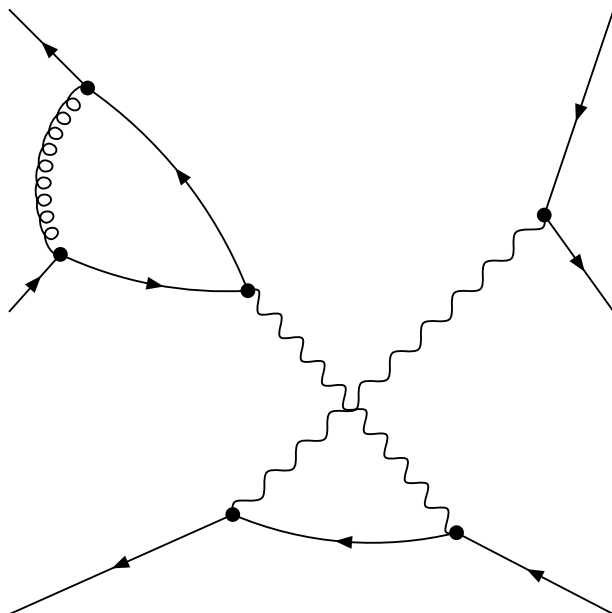
$$-1-8-15+16$$



$$-1+10+13-16$$



$$-1-8+10$$



$$-1+13-15$$

embedding 68 [1, 2, 0, 1]

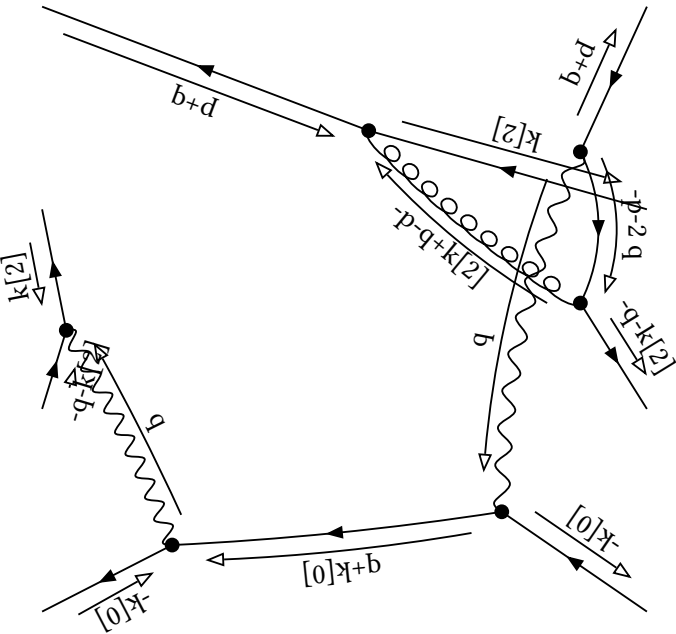
initial

Denominator:

$\text{prop}[0,k[2]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,-p-q]^{-1} \text{prop}[0,-p-2\ q]^{-1} \text{prop}[0,-p-q+k[2]]^{-1}$

Partial Fractioned Denominator:

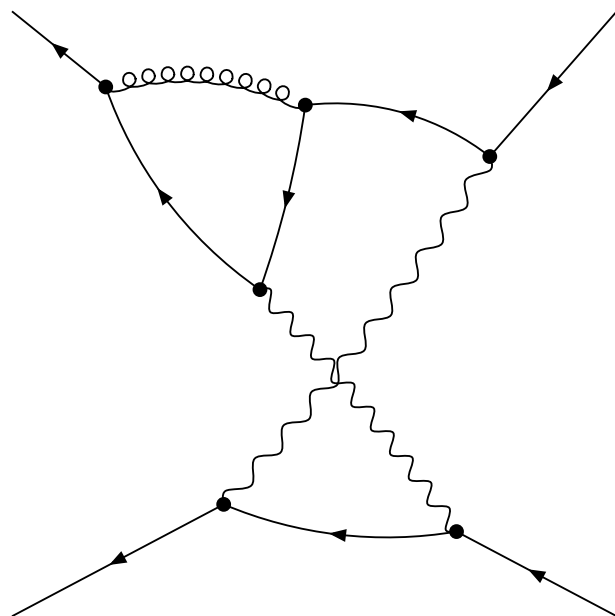
$(\text{dot}[p,p]+2\ \text{dot}[p,q]+\text{dot}[q,q])^{-1} (\text{dot}[p,p]+4\ \text{dot}[p,q]+4\ \text{dot}[q,q])^{-1} \text{prop}[0,k[2]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,-p-q+k[2]]^{-1}$



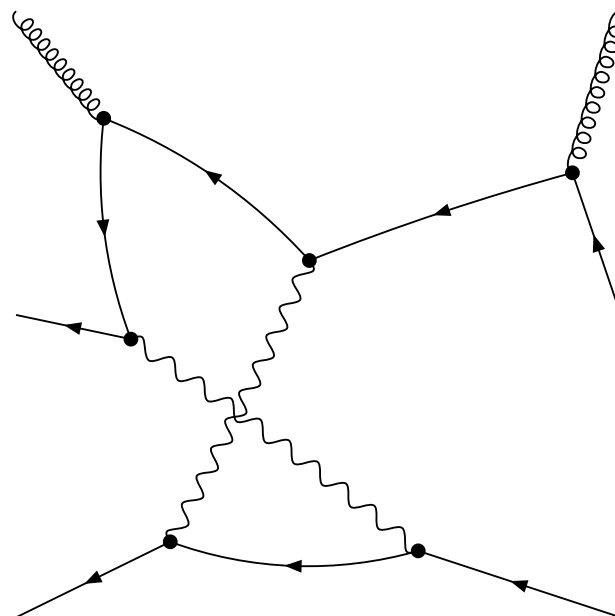
final

Denominator:

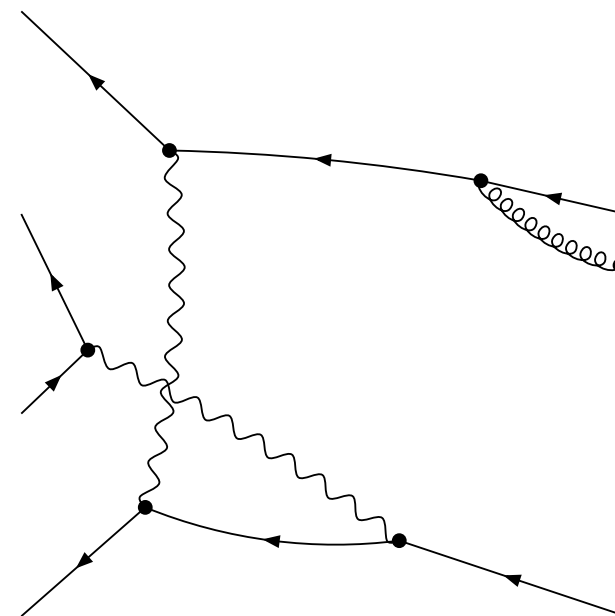
$\text{prop}[0,k[2]]^{-1} \text{prop}[0,-p]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,-p+k[2]]^{-1} \text{prop}[0,-p-q]^{-1}$



-1-15



-1+10-16



-1-8+10-13

embedding 69 [1, 2, 0, 2]

initial

Denominator:

0

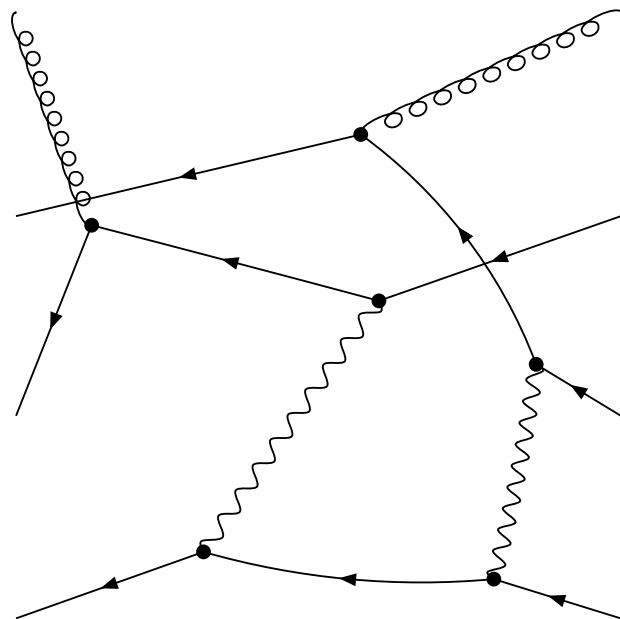
Partial Fractioned Denominator:

0

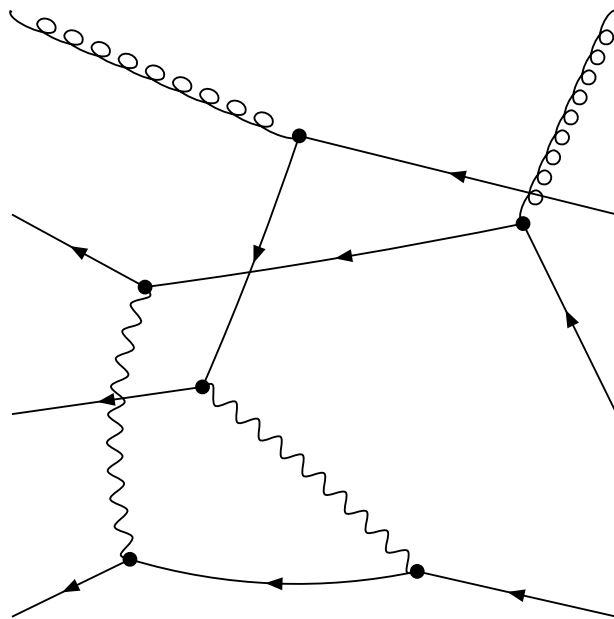
final

Denominator:

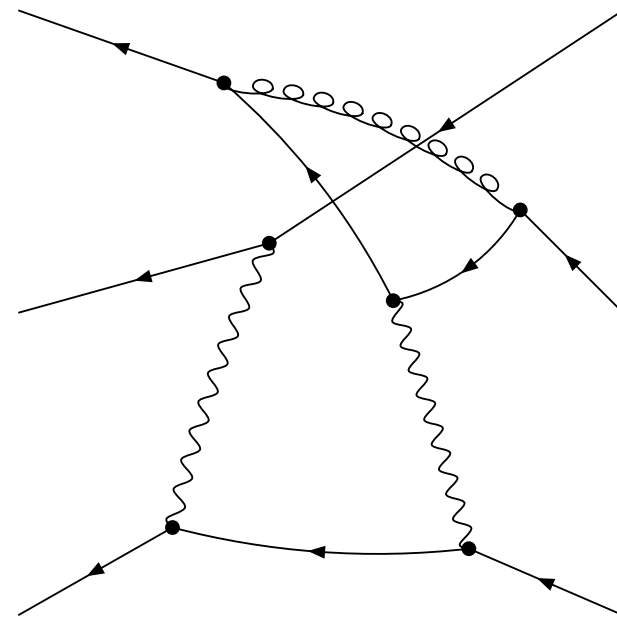
$$\text{prop}[0,k[2]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,-1/2 \ p+1/2 \ q]^{-1} \text{prop}[0,-1/2 \ p-1/2 \ q]^{-1} \text{prop}[0,-1/2 \ p+1/2 \ q+k[2]]^{-1}$$



$-1+8-15-16$



$-1+10-13-16$



$-1-13-15$

embedding 70 [1, 2, 1, -1]

initial

Denominator:

0

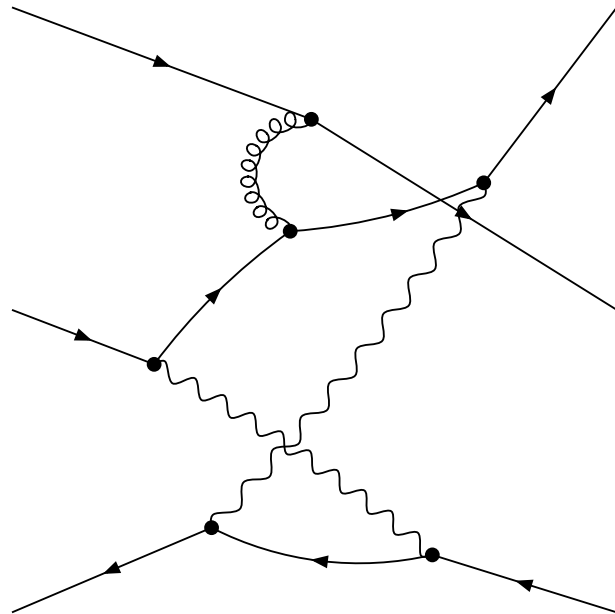
Partial Fractioned Denominator:

0

final

Denominator:

$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+k[3]]^{-1} \text{prop}[0, -p+2 \ k[3]]^{-1} \text{prop}[0, -p-q+k[3]]^{-1}$



-1-8+13

embedding 71 [1, 2, 1, 0]

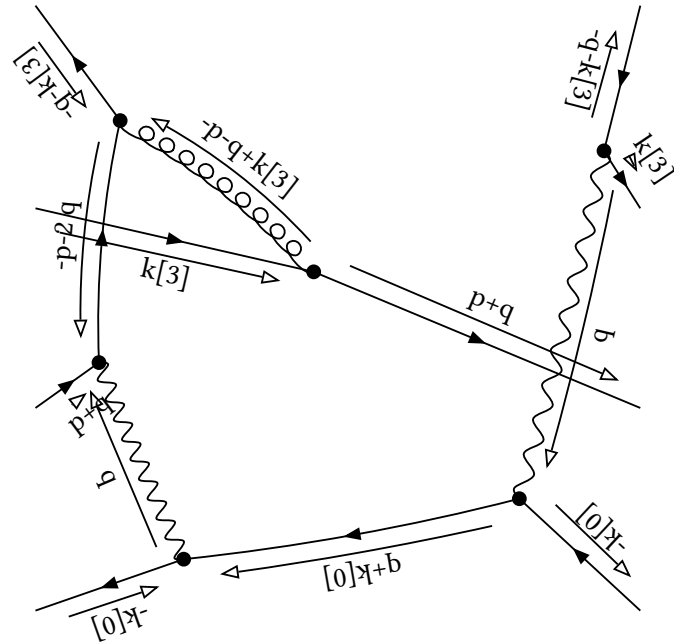
initial

Denominator:

$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-q]^{-1} \text{prop}[0, -p-2q]^{-1} \text{prop}[0, -p-q+k[3]]^{-1}$$

Partial Fractioned Denominator:

$$(\text{dot}[p,p]+2 \text{ dot}[p,q]+\text{dot}[q,q])^{-1} (\text{dot}[p,p]+4 \text{ dot}[p,q]+4 \text{ dot}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-p-q+k[3]]^{-1}$$

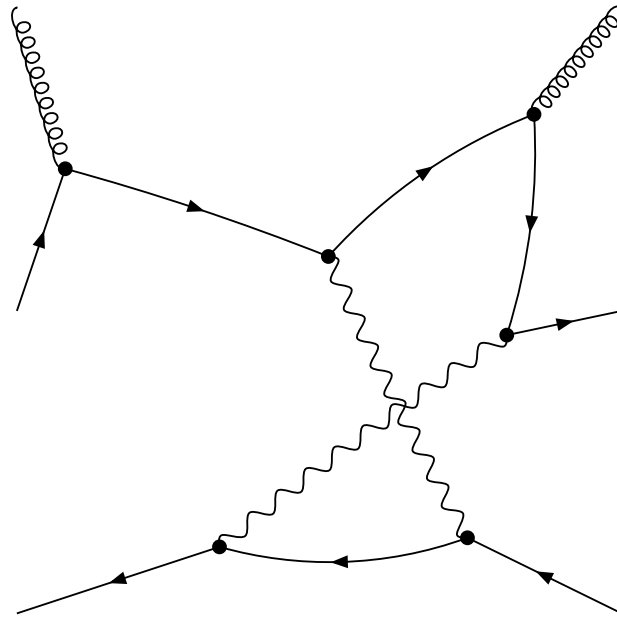


-3-8+13-15

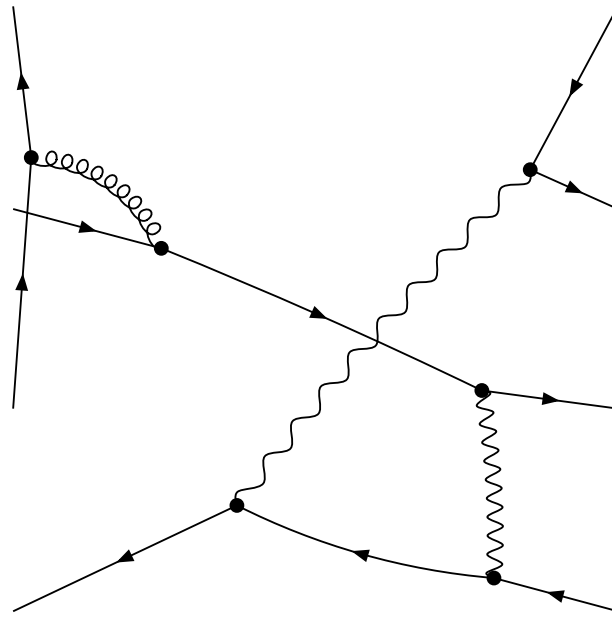
final

Denominator:

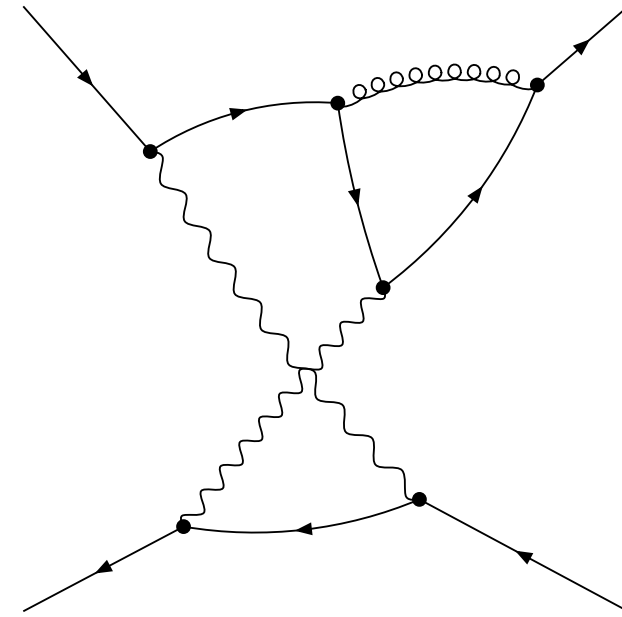
$\text{prop}[0,k[3]]^{-1} \text{prop}[0,-p]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-p+k[3]]^{-1} \text{prop}[0,-p-q]^{-1}$



-1+13-16



-1-10+13-15



-1-8

embedding 72 [1, 2, 1, 1]

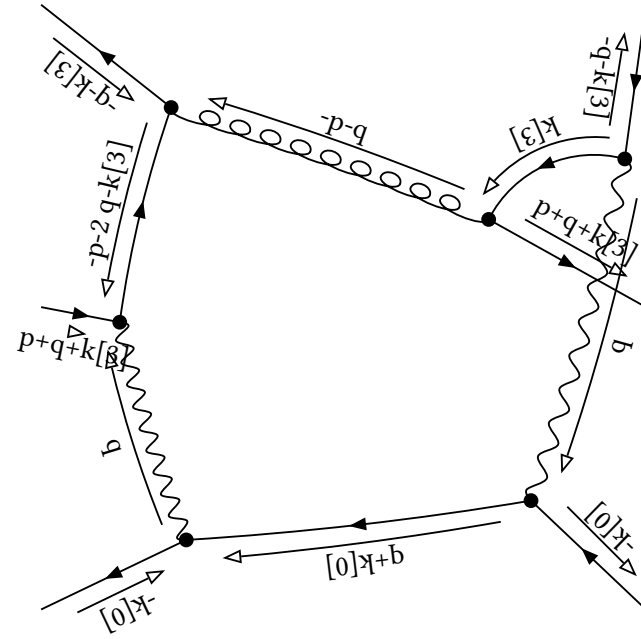
initial

Denominator:

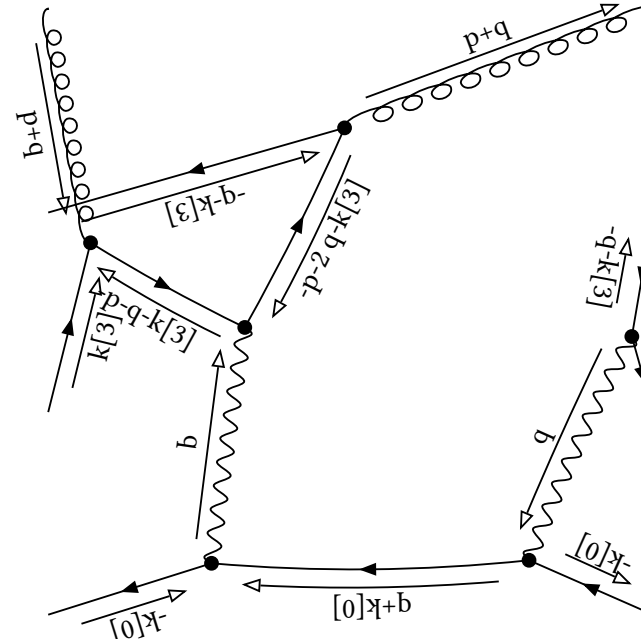
$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-q]^{-1} \text{prop}[0, -p-q-k[3]]^{-1} \text{prop}[0, -p-2q-k[3]]^{-1}$$

Partial Fractioned Denominator:

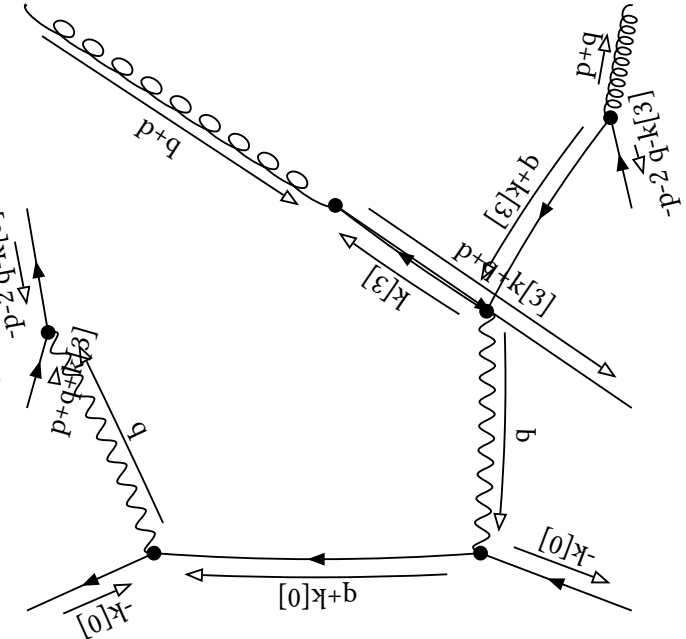
$$\begin{aligned} & -(-2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} (\text{dot}[p, p] + 2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-q-k[3]]^{-1} \\ & + (-2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} (\text{dot}[p, p] + 2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-2q-k[3]]^{-1} \\ & + (-2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} (\text{dot}[p, p] + 2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -p-q-k[3]]^{-1} \text{prop}[0, -p-2q-k[3]]^{-1} \\ & - (-2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} (\text{dot}[p, p] + 2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-q-k[3]]^{-1} \text{prop}[0, -p-2q-k[3]]^{-1} \end{aligned}$$



-3-8-15



-3+13-15-16

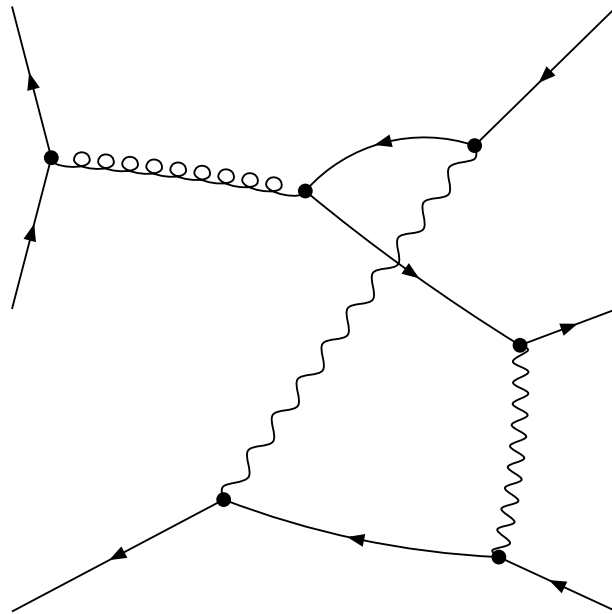


-3-8+10-16

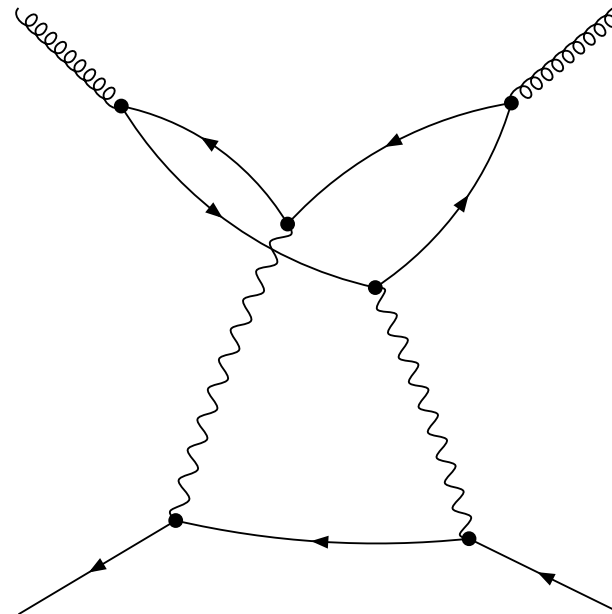
final

Denominator:

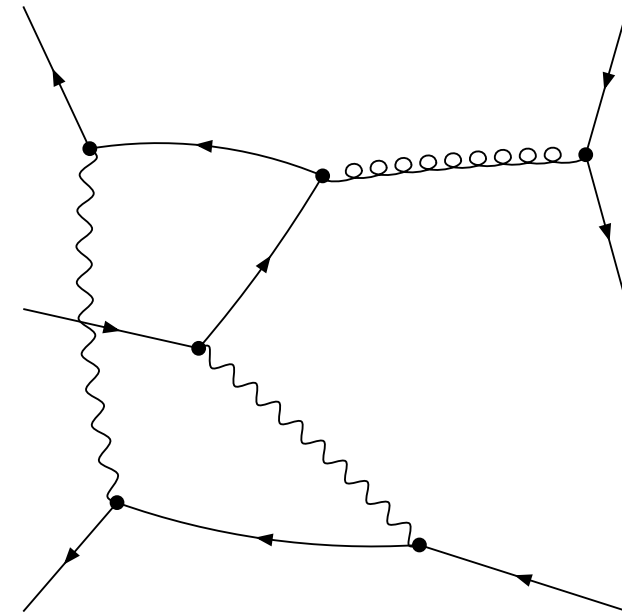
$\text{prop}[0,k[3]]^{-1} \text{prop}[0,-p]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-p-k[3]]^{-1} \text{prop}[0,-p-q-k[3]]^{-1}$



-1-10-15



-1-16



-1-8-13

embedding 73 [1, 2, 1, 2]

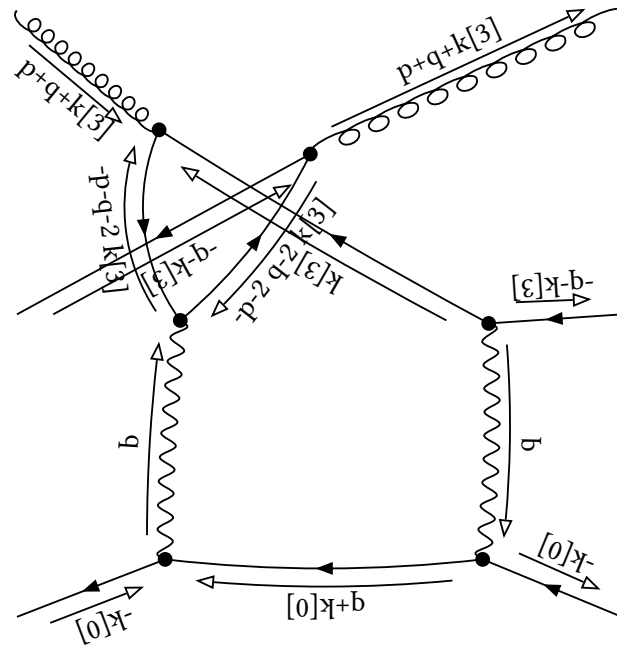
initial

Denominator:

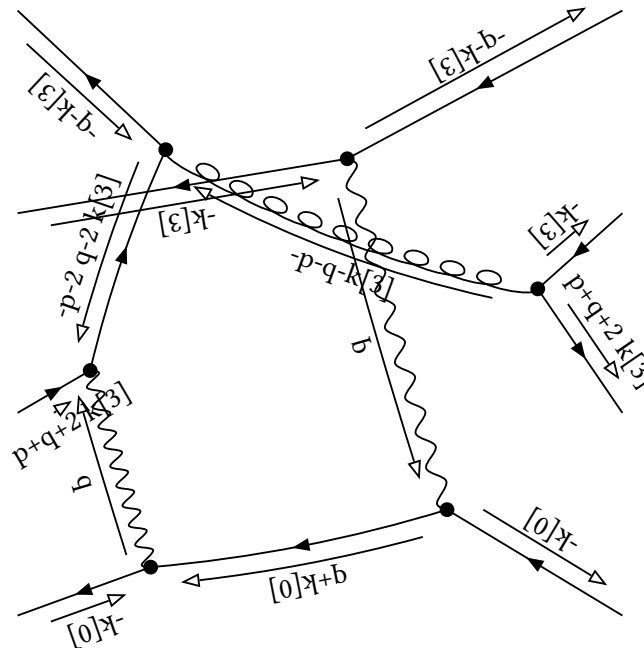
$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-q-k[3]]^{-1} \text{prop}[0, -p-q-2 k[3]]^{-1} \text{prop}[0, -p-2 q-2 k[3]]^{-1}$$

Partial Fractioned Denominator:

$$\begin{aligned} & 1/4 (-\text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] + \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-q-k[3]]^{-1} \\ & - 1/2 (-\text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] + \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-q-2 k[3]]^{-1} \\ & - 1/2 (-\text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] + \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -p-q-k[3]]^{-1} \text{prop}[0, -p-2 q-2 k[3]]^{-1} \\ & + (-\text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] + \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -p-q-2 k[3]]^{-1} \text{prop}[0, -p-2 q-2 k[3]]^{-1} \\ & - 1/2 (-\text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] + \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-q-k[3]]^{-1} \text{prop}[0, -p-q-2 k[3]]^{-1} \\ & + (-\text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] + \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, -p-q-k[3]]^{-1} \text{prop}[0, -p-q-2 k[3]]^{-1} \text{prop}[0, -p-2 q-2 k[3]]^{-1} \\ & - 1/2 (-\text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-q-k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & + (-\text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-2 q-2 k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & + (-\text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -p-q-k[3]]^{-1} \text{prop}[0, -p-2 q-2 k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & + (-\text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-q-k[3]]^{-1} \text{prop}[0, -p-q-2 k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & - 2 (-\text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-q-2 k[3]]^{-1} \text{prop}[0, -p-2 q-2 k[3]]^{-1} \text{dot}[p, p]^{-1} \\ & - 2 (-\text{dot}[p, q] - 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, -p-q-k[3]]^{-1} \text{prop}[0, -p-q-2 k[3]]^{-1} \text{prop}[0, -p-2 q-2 k[3]]^{-1} \text{dot}[p, p]^{-1} \end{aligned}$$



-3-15-16

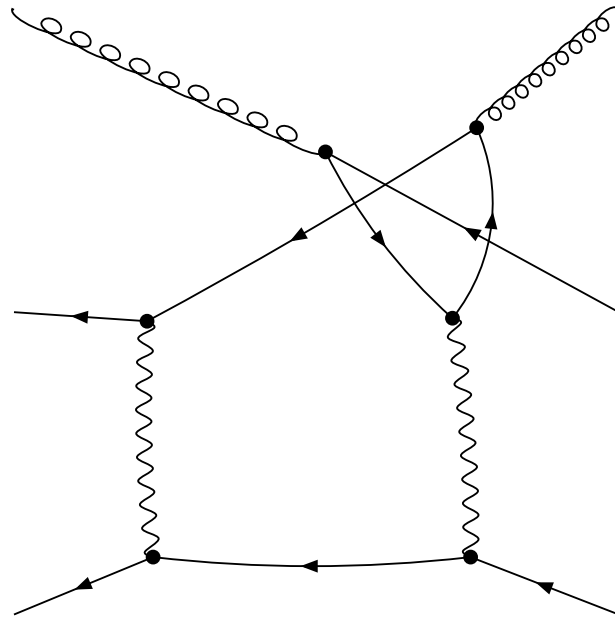


-3-8-13-15

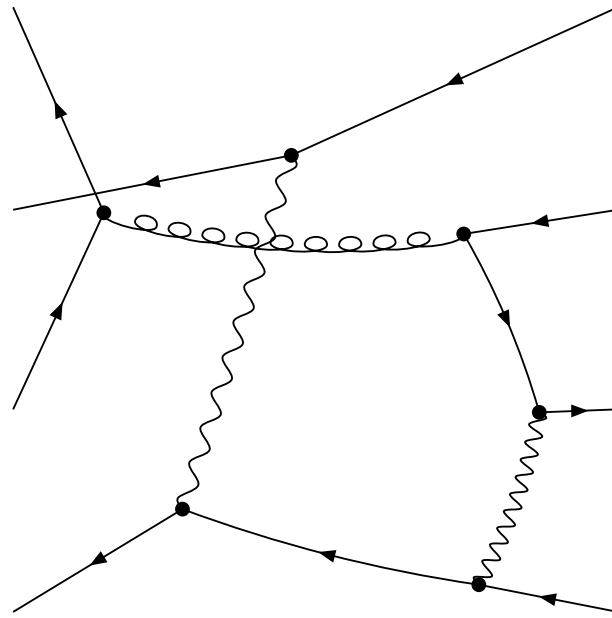
final

Denominator:

$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-k[3]]^{-1} \text{prop}[0, -p-2 k[3]]^{-1} \text{prop}[0, -p-q-2 k[3]]^{-1}$



-1-13-16



-1-10-13-15

embedding 74 [1, 2, 1, 3]

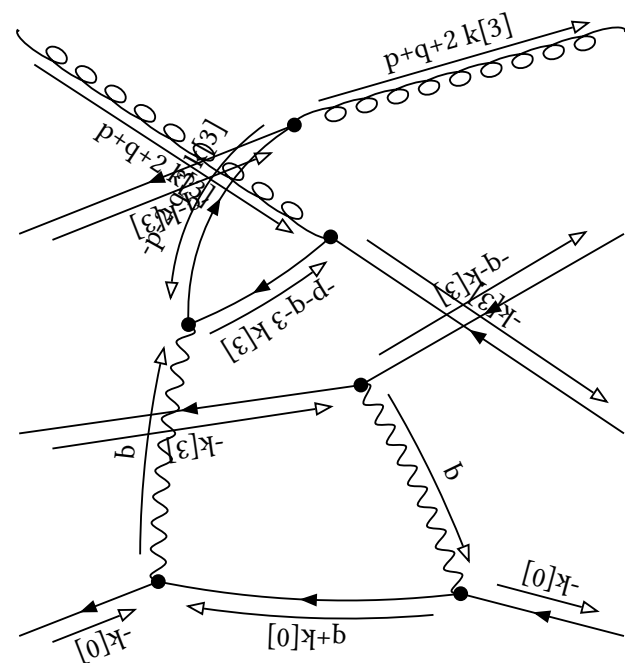
initial

Denominator:

$$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-p-q-2 \ k[3]]^{-1} \text{prop}[0,-p-q-3 \ k[3]]^{-1} \text{prop}[0,-p-2 \ q-3 \ k[3]]^{-1}$$

Partial Fractioned Denominator:

[illegible]



final

Denominator:

0

embedding 75 [1, 2, 2, -1]

initial

Denominator:

0

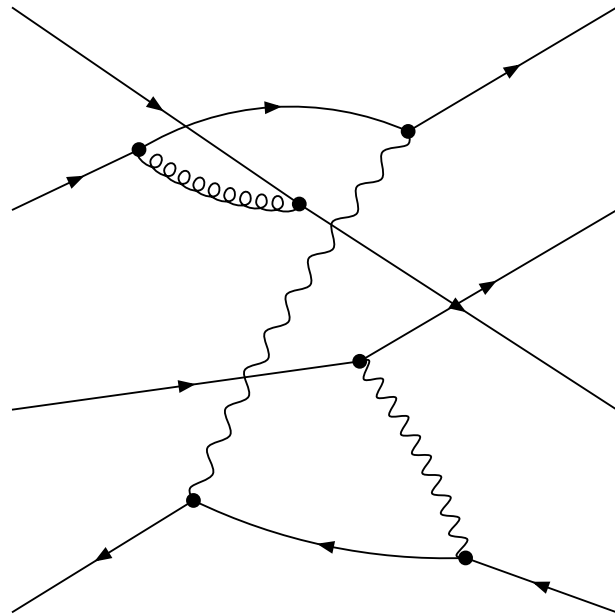
Partial Fractioned Denominator:

0

final

Denominator:

$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 \ p+1/2 \ q+1/2 \ k[3]]^{-1} \text{prop}[0, -1/2 \ p+1/2 \ q+3/2 \ k[3]]^{-1} \text{prop}[0, -1/2 \ p-1/2 \ q+1/2 \ k[3]]^{-1}$



-1-8-10+13

embedding 76 [1, 2, 2, 0]

initial

Denominator:

0

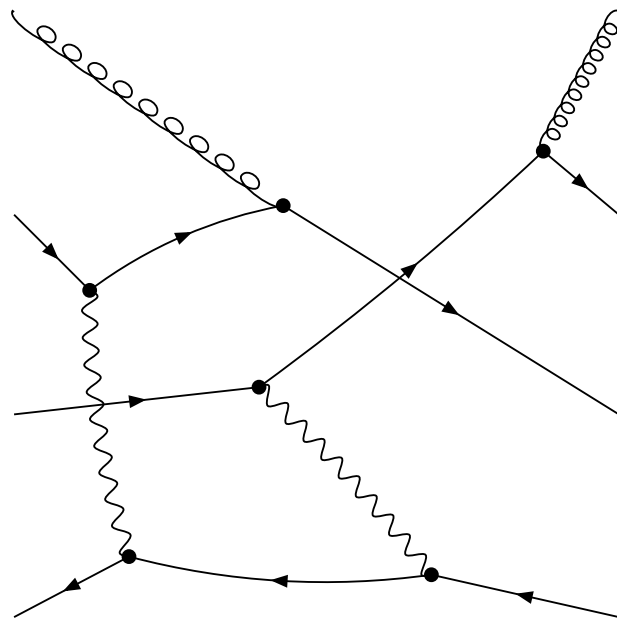
Partial Fractioned Denominator:

0

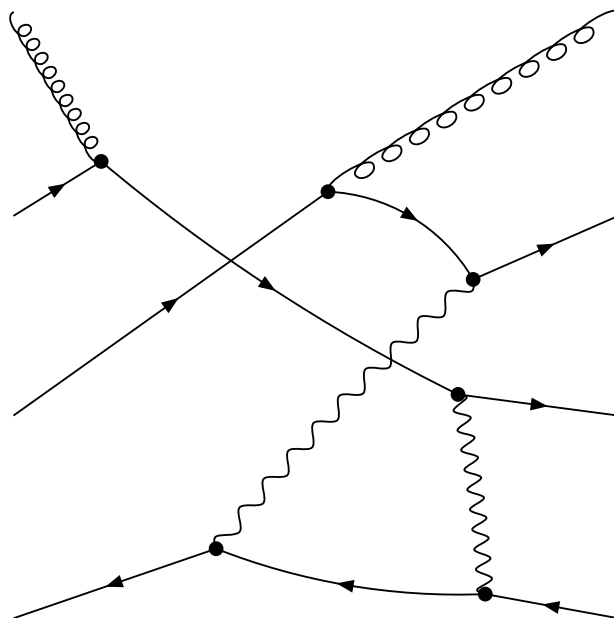
final

Denominator:

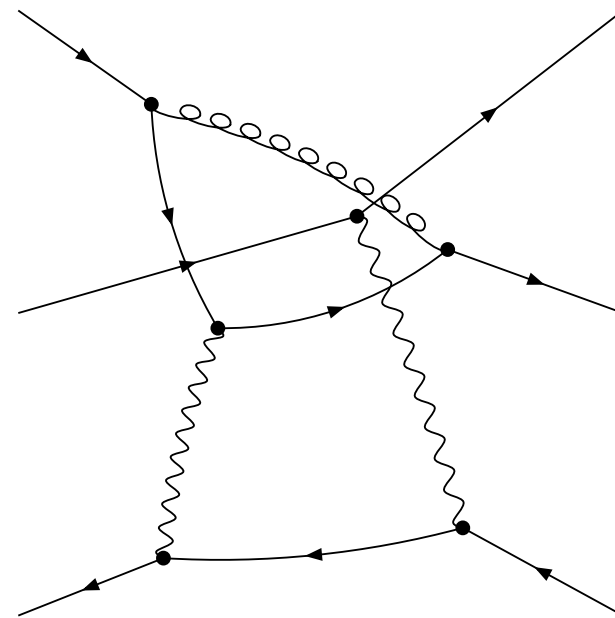
$$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-1/2 \ p+1/2 \ q]^{-1} \text{prop}[0,-1/2 \ p-1/2 \ q]^{-1} \text{prop}[0,-1/2 \ p+1/2 \ q+k[3]]^{-1}$$



$$-1-8+15-16$$

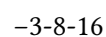
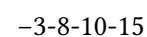


$$-1-10+13-16$$



$$-1-8-10$$

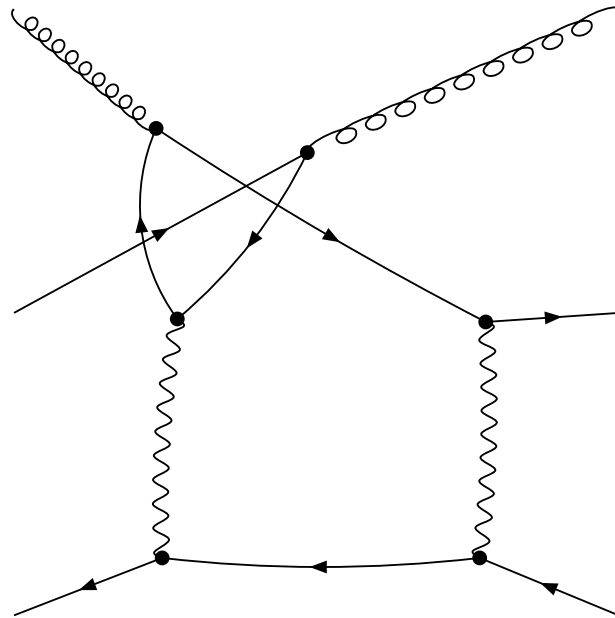
initial

$$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-1/2 \ p+1/2 \ k[3]]^{-1} \text{prop}[0,-1/2 \ p-1/2 \ k[3]]^{-1} \text{prop}[0,-1/2 \ p-q-1/2 \ k[3]]^{-1}$$
[illegible]

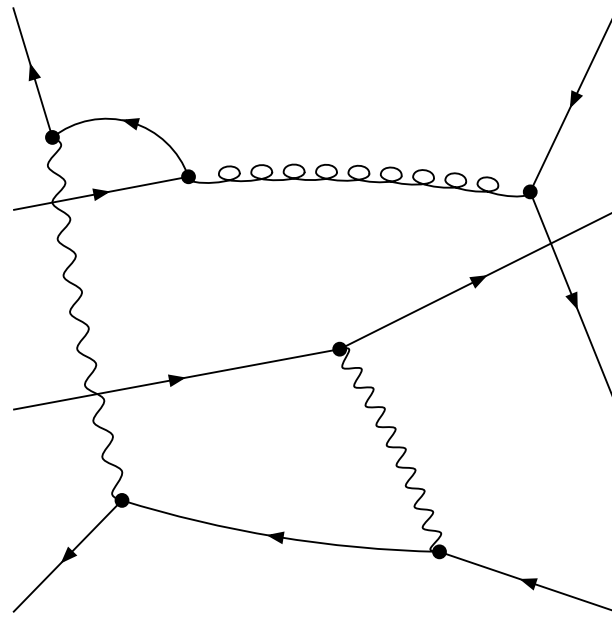
final

Denominator:

$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-1/2 \ p+1/2 \ q+1/2 \ k[3]]^{-1} \text{prop}[0,-1/2 \ p+1/2 \ q-1/2 \ k[3]]^{-1} \text{prop}[0,-1/2 \ p-1/2 \ q-1/2 \ k[3]]^{-1}$



-1-10-16



-1-8-10-13

embedding 78 [1, 2, 2, 2]

initial

Denominator:

0

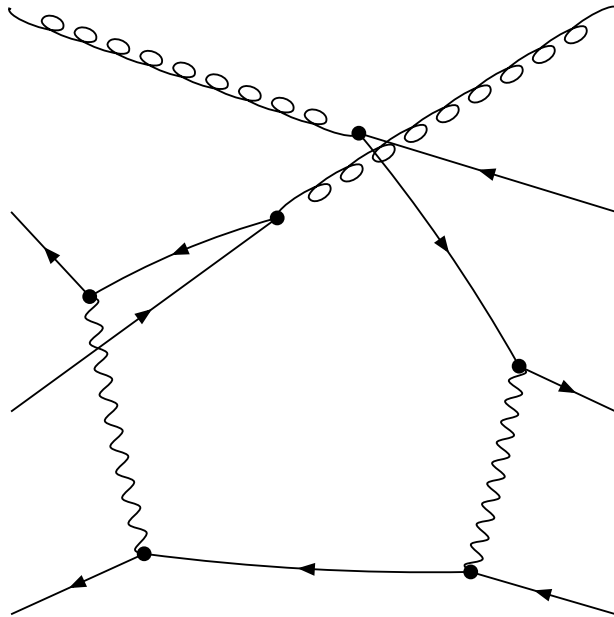
Partial Fractioned Denominator:

0

final

Denominator:

$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-1/2 \ p+1/2 \ q]^{-1} \text{prop}[0,-1/2 \ p+1/2 \ q-k[3]]^{-1} \text{prop}[0,-1/2 \ p-1/2 \ q-k[3]]^{-1}$



-1-10-13-16

embedding 79 [1, 2, 3, 1]

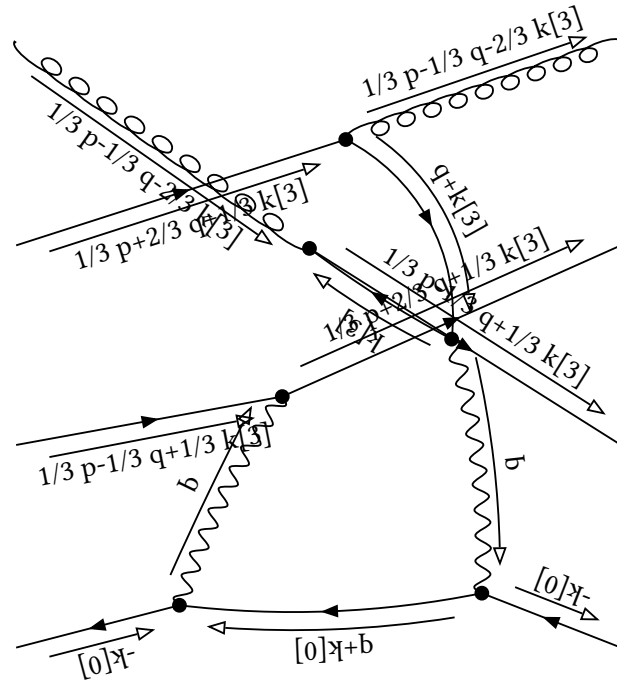
initial

Denominator:

$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/3 p+1/3 q+2/3 k[3]]^{-1} \text{prop}[0, -1/3 p+1/3 q-1/3 k[3]]^{-1} \text{prop}[0, -1/3 p-2/3 q-1/3 k[3]]^{-1}$$

Partial Fractioned Denominator:

$$\begin{aligned} & 3 \left(\frac{1}{3} \text{dot}[p, p] - \frac{2}{3} \text{dot}[p, q] + \frac{1}{3} \text{dot}[q, q] \right)^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/3 p+1/3 q+2/3 k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & + \frac{3}{2} \left(\frac{1}{3} \text{dot}[p, p] - \frac{2}{3} \text{dot}[p, q] + \frac{1}{3} \text{dot}[q, q] \right)^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/3 p+1/3 q-1/3 k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & - \left(\frac{1}{3} \text{dot}[p, p] - \frac{2}{3} \text{dot}[p, q] + \frac{1}{3} \text{dot}[q, q] \right)^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -1/3 p+1/3 q+2/3 k[3]]^{-1} \text{prop}[0, -1/3 p-2/3 q-1/3 k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & - \frac{1}{2} \left(\frac{1}{3} \text{dot}[p, p] - \frac{2}{3} \text{dot}[p, q] + \frac{1}{3} \text{dot}[q, q] \right)^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -1/3 p+1/3 q-1/3 k[3]]^{-1} \text{prop}[0, -1/3 p-2/3 q-1/3 k[3]]^{-1} \\ & \text{dot}[p, q]^{-1} \\ & - \left(\frac{1}{3} \text{dot}[p, p] - \frac{2}{3} \text{dot}[p, q] + \frac{1}{3} \text{dot}[q, q] \right)^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/3 p+1/3 q+2/3 k[3]]^{-1} \text{prop}[0, -1/3 p+1/3 q-1/3 k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & + \frac{1}{3} \left(\frac{1}{3} \text{dot}[p, p] - \frac{2}{3} \text{dot}[p, q] + \frac{1}{3} \text{dot}[q, q] \right)^{-1} \text{prop}[0, -1/3 p+1/3 q+2/3 k[3]]^{-1} \text{prop}[0, -1/3 p+1/3 q-1/3 k[3]]^{-1} \text{prop}[0, -1/3 p-2/3 q-1/3 k[3]]^{-1} \\ & k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & - 3 \left(\frac{1}{3} \text{dot}[p, p] + \frac{2}{3} \text{dot}[p, q] + \frac{1}{3} \text{dot}[q, q] \right)^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/3 p+1/3 q+2/3 k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & - \frac{3}{2} \left(\frac{1}{3} \text{dot}[p, p] + \frac{2}{3} \text{dot}[p, q] + \frac{1}{3} \text{dot}[q, q] \right)^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/3 p-2/3 q-1/3 k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & + \left(\frac{1}{3} \text{dot}[p, p] + \frac{2}{3} \text{dot}[p, q] + \frac{1}{3} \text{dot}[q, q] \right)^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -1/3 p+1/3 q+2/3 k[3]]^{-1} \text{prop}[0, -1/3 p-2/3 q-1/3 k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & + \left(\frac{1}{3} \text{dot}[p, p] + \frac{2}{3} \text{dot}[p, q] + \frac{1}{3} \text{dot}[q, q] \right)^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/3 p+1/3 q+2/3 k[3]]^{-1} \text{prop}[0, -1/3 p+1/3 q-1/3 k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & + \frac{1}{2} \left(\frac{1}{3} \text{dot}[p, p] + \frac{2}{3} \text{dot}[p, q] + \frac{1}{3} \text{dot}[q, q] \right)^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/3 p+1/3 q-1/3 k[3]]^{-1} \text{prop}[0, -1/3 p-2/3 q-1/3 k[3]]^{-1} \\ & \text{dot}[p, q]^{-1} \\ & - \frac{1}{3} \left(\frac{1}{3} \text{dot}[p, p] + \frac{2}{3} \text{dot}[p, q] + \frac{1}{3} \text{dot}[q, q] \right)^{-1} \text{prop}[0, -1/3 p+1/3 q+2/3 k[3]]^{-1} \text{prop}[0, -1/3 p+1/3 q-1/3 k[3]]^{-1} \text{prop}[0, -1/3 p-2/3 q-1/3 k[3]]^{-1} \\ & k[3]]^{-1} \text{dot}[p, q]^{-1} \end{aligned}$$



final

Denominator:

0

embedding 80 [1, 3, 0, 1]

initial

Denominator:

0

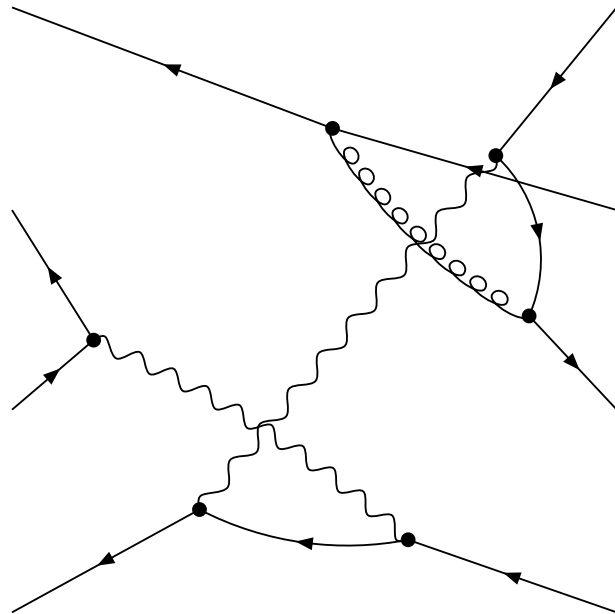
Partial Fractioned Denominator:

0

final

Denominator:

$\text{prop}[0,k[2]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,-p-q]^{-1} \text{prop}[0,-p-2q]^{-1} \text{prop}[0,-p-q+k[2]]^{-1}$



-1-8+10-15

embedding 81 [1, 3, 1, 0]

initial

Denominator:

0

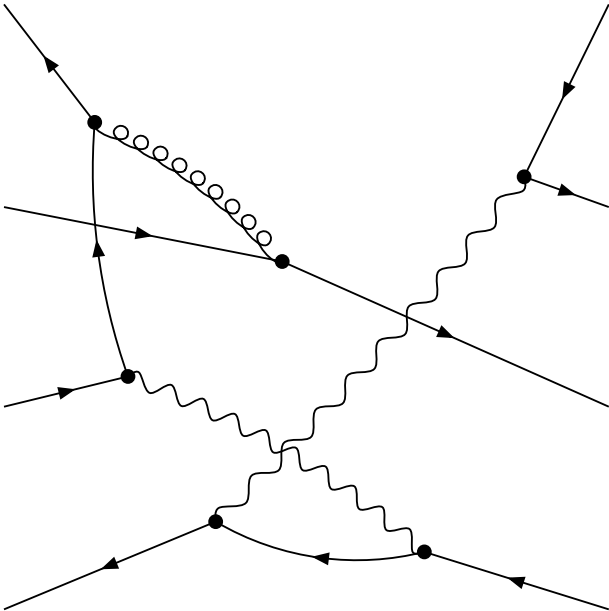
Partial Fractioned Denominator:

0

final

Denominator:

$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-p-q]^{-1} \text{prop}[0,-p-2\ q]^{-1} \text{prop}[0,-p-q+k[3]]^{-1}$



$-1-8+13-15$

embedding 82 [1, 3, 1, 1]

initial

Denominator:

0

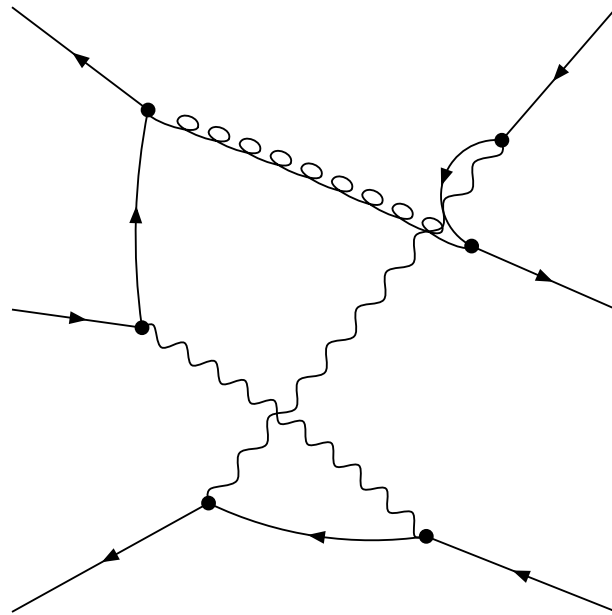
Partial Fractioned Denominator:

0

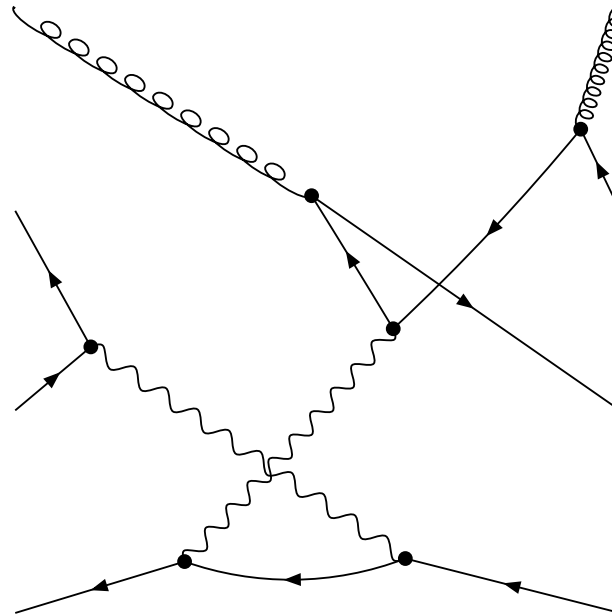
final

Denominator:

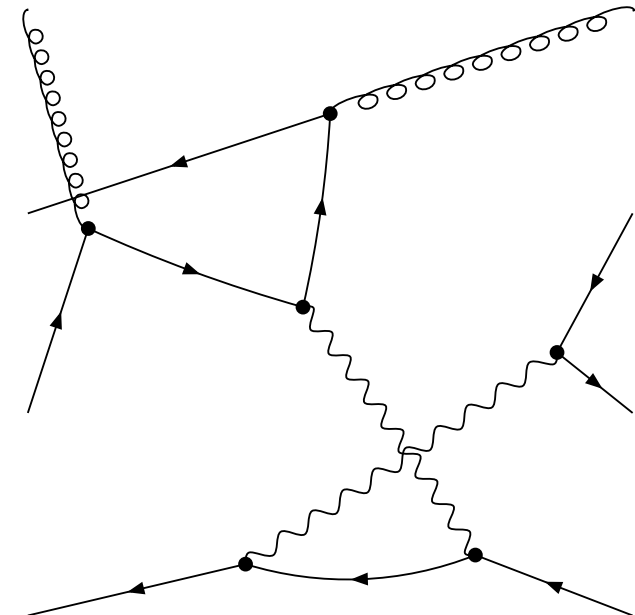
$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-p-q]^{-1} \text{prop}[0,-p-q-k[3]]^{-1} \text{prop}[0,-p-2q-k[3]]^{-1}$



-1-8-15



-1-8+10-16



-1+13-15-16

embedding 83 [1, 3, 1, 2]

initial

Denominator:

0

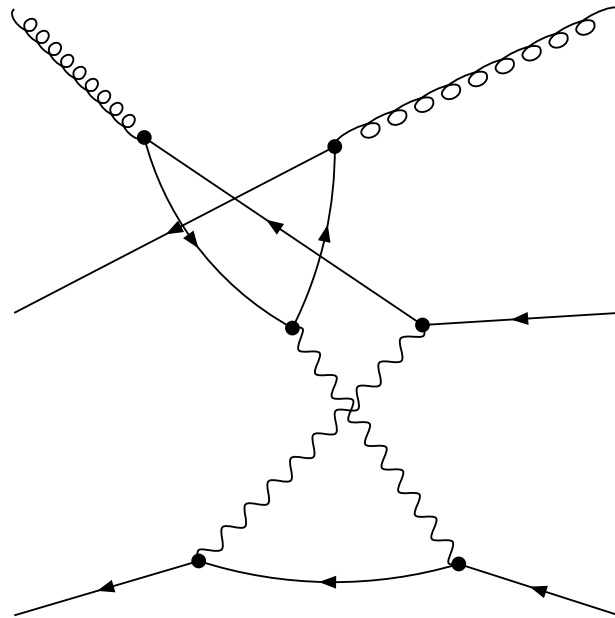
Partial Fractioned Denominator:

0

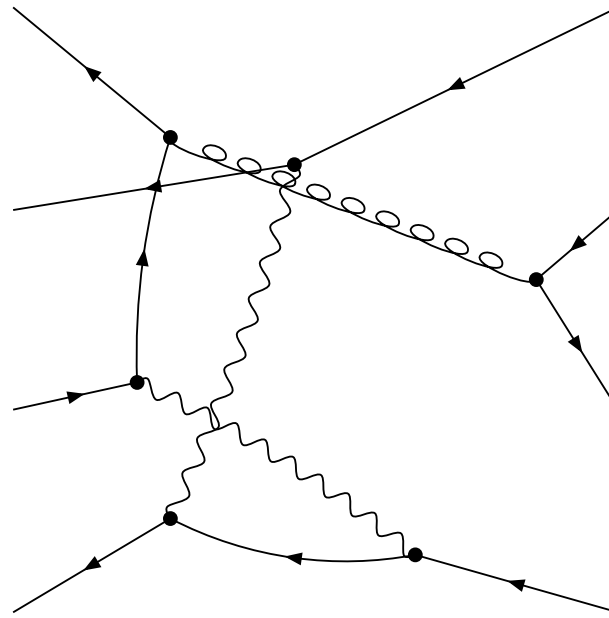
final

Denominator:

$$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-p-q-k[3]]^{-1} \text{prop}[0,-p-q-2 k[3]]^{-1} \text{prop}[0,-p-2 q-2 k[3]]^{-1}$$



-1-15-16



-1-8-13-15

embedding 84 [1, 3, 1, 3]

initial

Denominator:

0

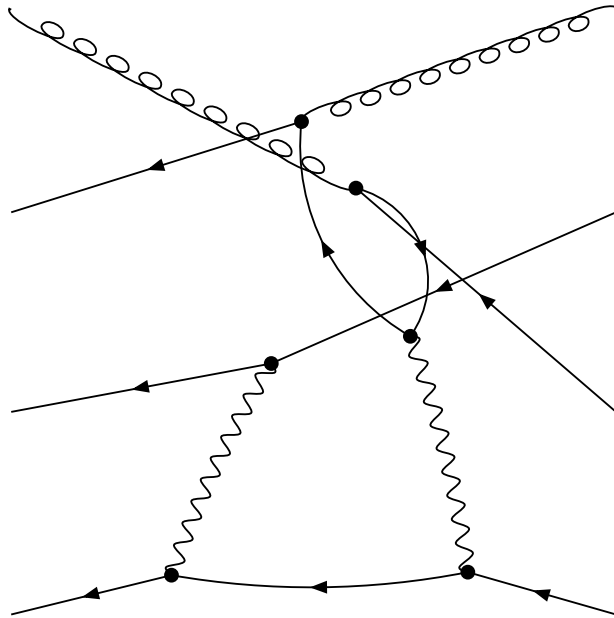
Partial Fractioned Denominator:

0

final

Denominator:

$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-p-q-2 \ k[3]]^{-1} \text{prop}[0,-p-q-3 \ k[3]]^{-1} \text{prop}[0,-p-2 \ q-3 \ k[3]]^{-1}$



-1-13-15-16

embedding 85 [1, 3, 2, 1]

initial

Denominator:

0

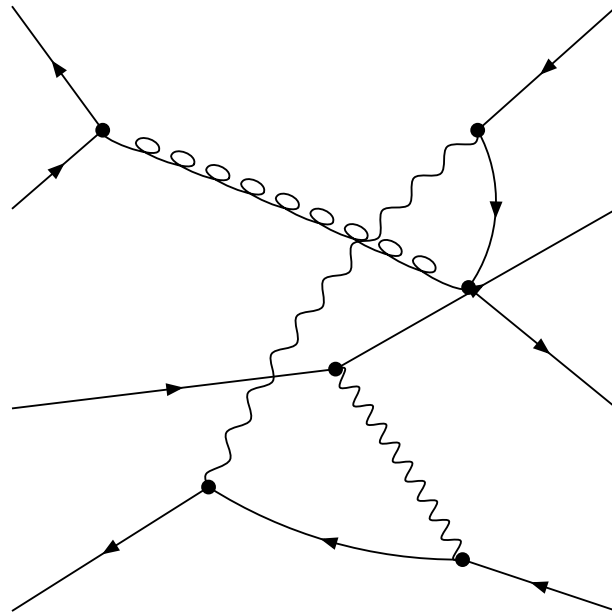
Partial Fractioned Denominator:

0

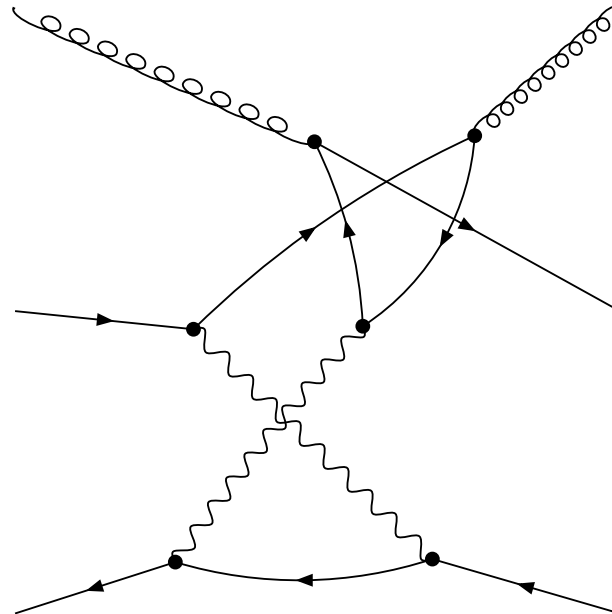
final

Denominator:

$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-1/2 \ p+1/2 \ k[3]]^{-1} \text{prop}[0,-1/2 \ p-1/2 \ k[3]]^{-1} \text{prop}[0,-1/2 \ p-q-1/2 \ k[3]]^{-1}$



-1-8-10-15



-1-8-16

embedding 86 [1, 3, 2, 2]

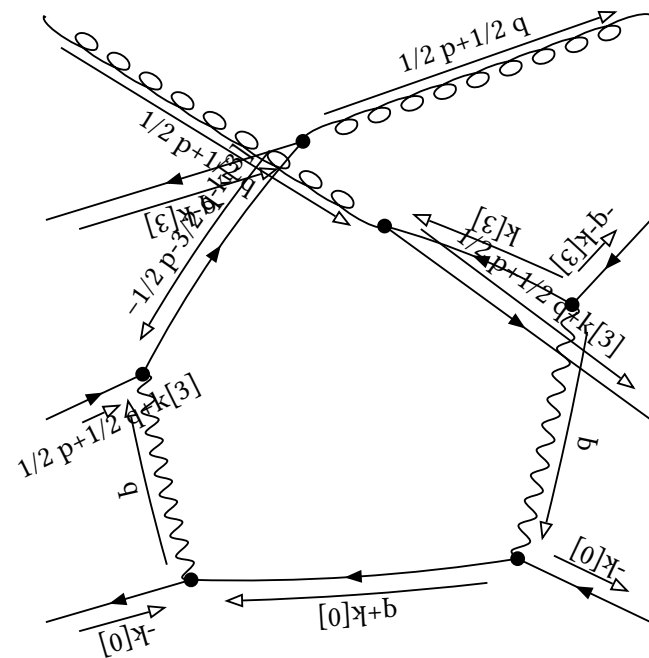
initial

Denominator:

$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p - 1/2 q]^{-1} \text{prop}[0, -1/2 p - 1/2 q - k[3]]^{-1} \text{prop}[0, -1/2 p - 3/2 q - k[3]]^{-1}$$

Partial Fractioned Denominator:

$$\begin{aligned} & -(-\text{dot}[p, q] - \text{dot}[q, q])^{-1} (1/4 \text{dot}[p, p] + 1/2 \text{dot}[p, q] + 1/4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p - 1/2 q - k[3]]^{-1} \\ & + (-\text{dot}[p, q] - \text{dot}[q, q])^{-1} (1/4 \text{dot}[p, p] + 1/2 \text{dot}[p, q] + 1/4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p - 3/2 q - k[3]]^{-1} \\ & + (-\text{dot}[p, q] - \text{dot}[q, q])^{-1} (1/4 \text{dot}[p, p] + 1/2 \text{dot}[p, q] + 1/4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, -1/2 p - 1/2 q - k[3]]^{-1} \text{prop}[0, -1/2 p - 3/2 q - k[3]]^{-1} \\ & - (-\text{dot}[p, q] - \text{dot}[q, q])^{-1} (1/4 \text{dot}[p, p] + 1/2 \text{dot}[p, q] + 1/4 \text{dot}[q, q])^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p - 1/2 q - k[3]]^{-1} \text{prop}[0, -1/2 p - 3/2 q - k[3]]^{-1} \end{aligned}$$



final

Denominator:

0

embedding 87 [1, 3, 3, 1]

initial

Denominator:

0

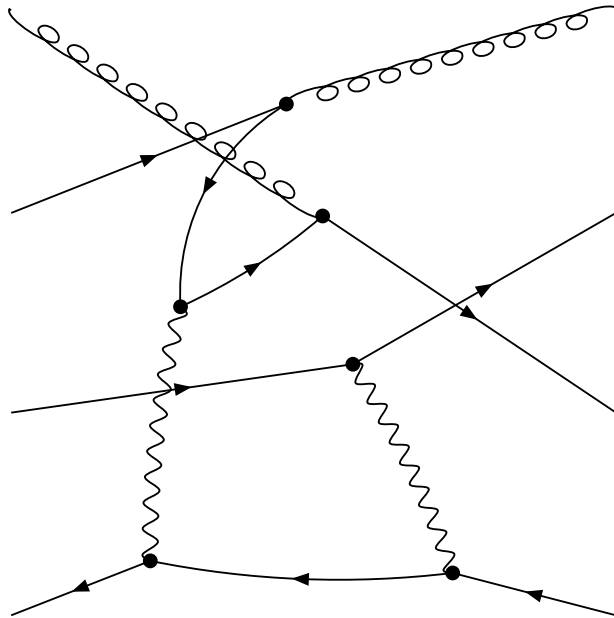
Partial Fractioned Denominator:

0

final

Denominator:

$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-1/3 \ p+1/3 \ q+2/3 \ k[3]]^{-1} \text{prop}[0,-1/3 \ p+1/3 \ q-1/3 \ k[3]]^{-1} \text{prop}[0,-1/3 \ p-2/3 \ q-1/3 \ k[3]]^{-1}$



-1-8-10-16

embedding 88 [1, 4, 2, 2]

initial

Denominator:

0

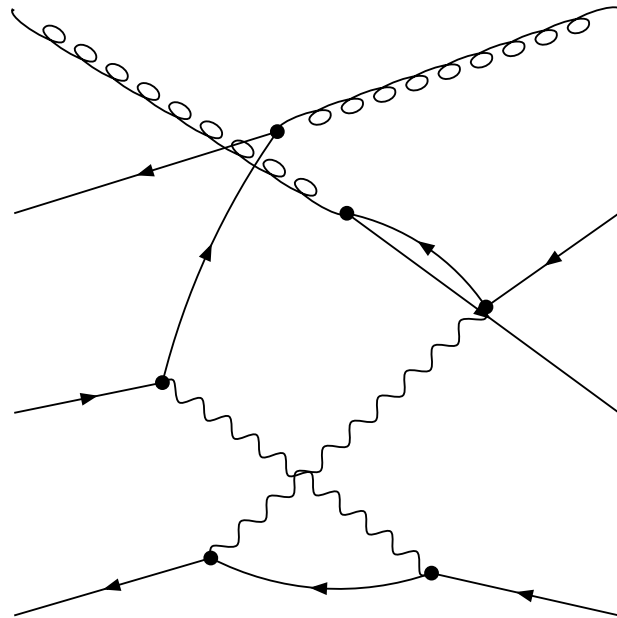
Partial Fractioned Denominator:

0

final

Denominator:

$$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-1/2 \ p-1/2 \ q]^{-1} \text{prop}[0,-1/2 \ p-1/2 \ q-k[3]]^{-1} \text{prop}[0,-1/2 \ p-3/2 \ q-k[3]]^{-1}$$



-1-8-15-16

