

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

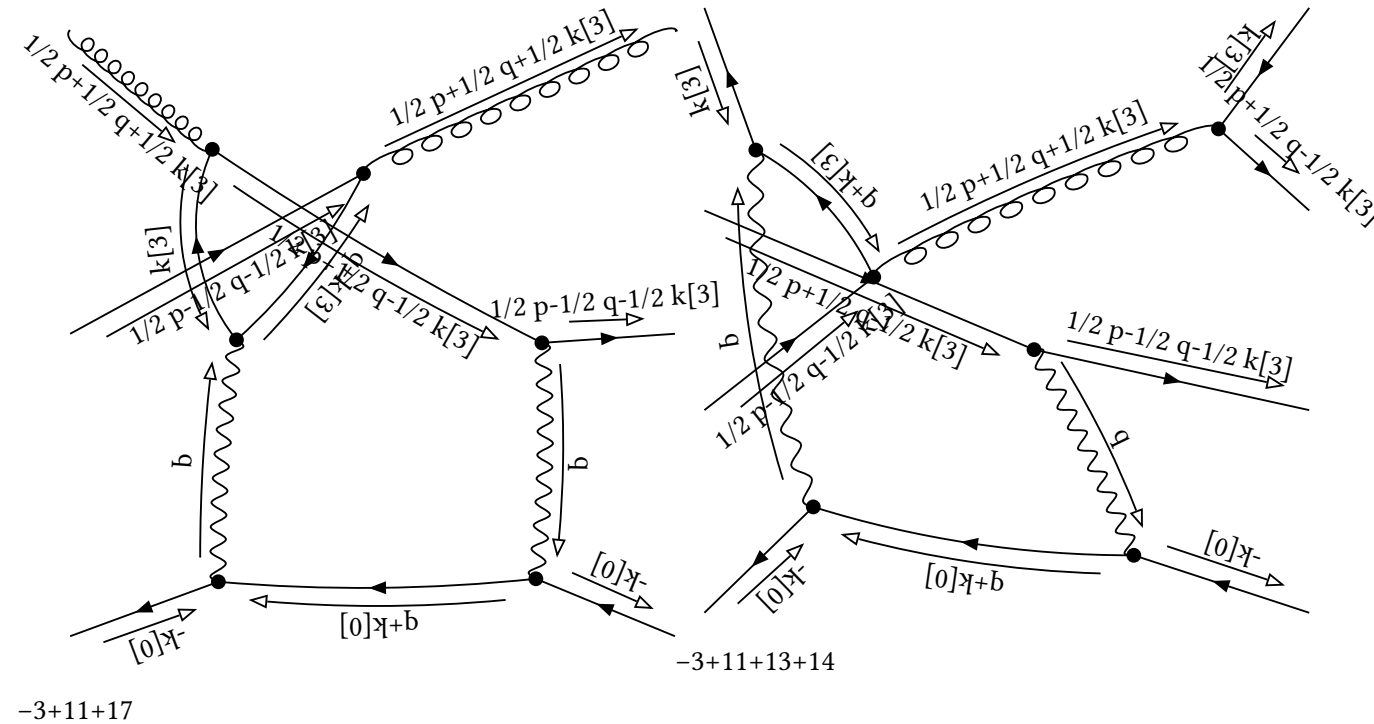
initial

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:

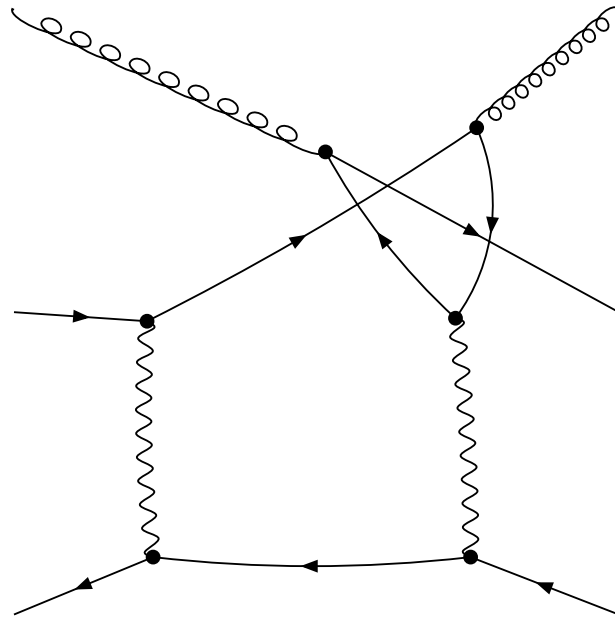
$$\begin{aligned} & 2 (-2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (1/2 \text{dot}[p, p] + \text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, 1/2 p+1/2 q+1/2 k[3]]^{-1} \\ & + 2 (-2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} (1/2 \text{dot}[p,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



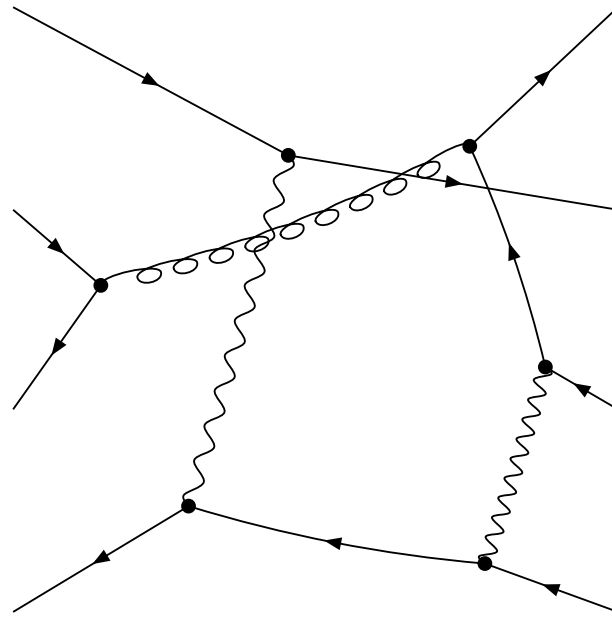
final

Denominator:

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



$$-1+13+17$$



$$-1+8+11+13$$

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

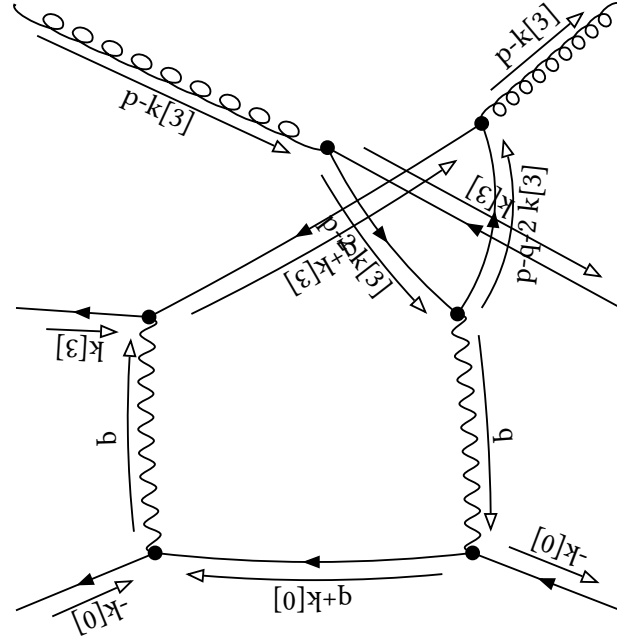
initial

Denominator:

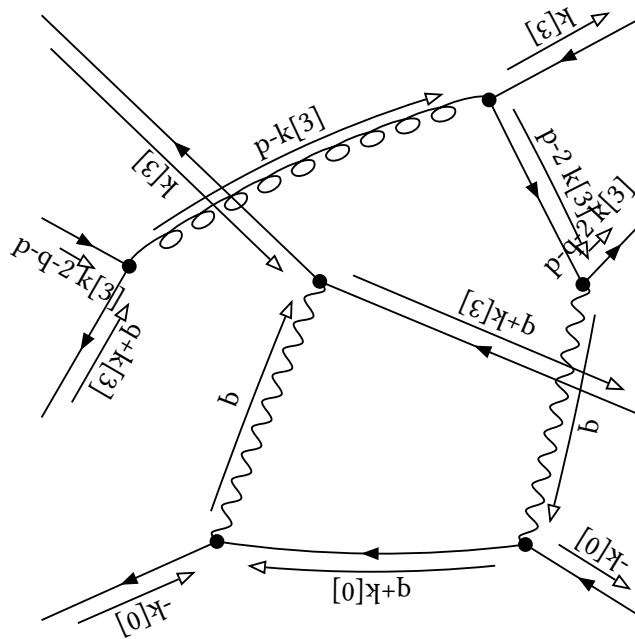
$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, p-k[3]]^{-1} \text{prop}[0, p-2 k[3]]^{-1} \text{prop}[0, p-q-2 k[3]]^{-1}$$

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}$$



$$-3+14+17$$

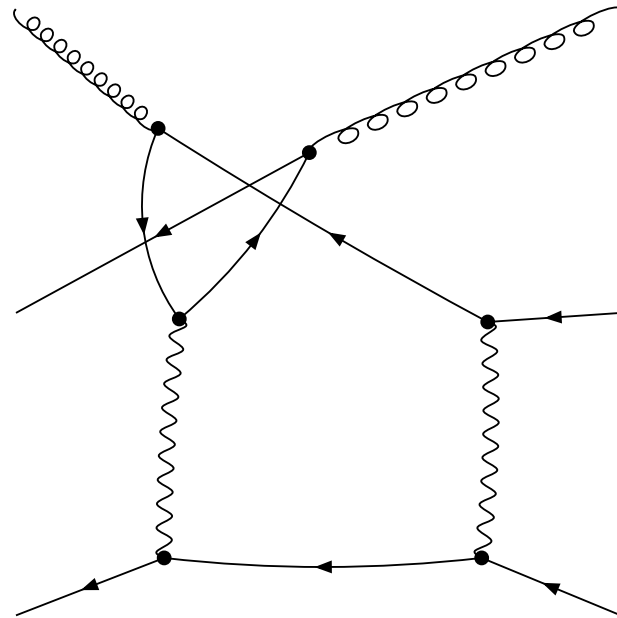


$$-3+8+11+14$$

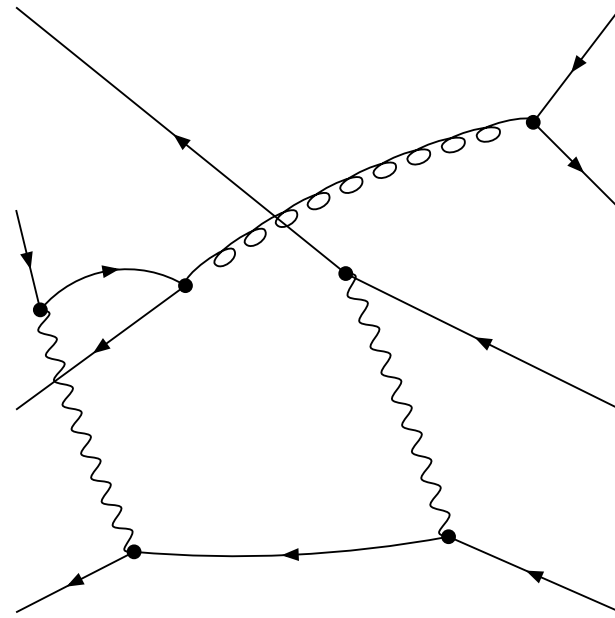
final

Denominator:

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



$$-1+8+17$$



$$-1+8+13+14$$

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

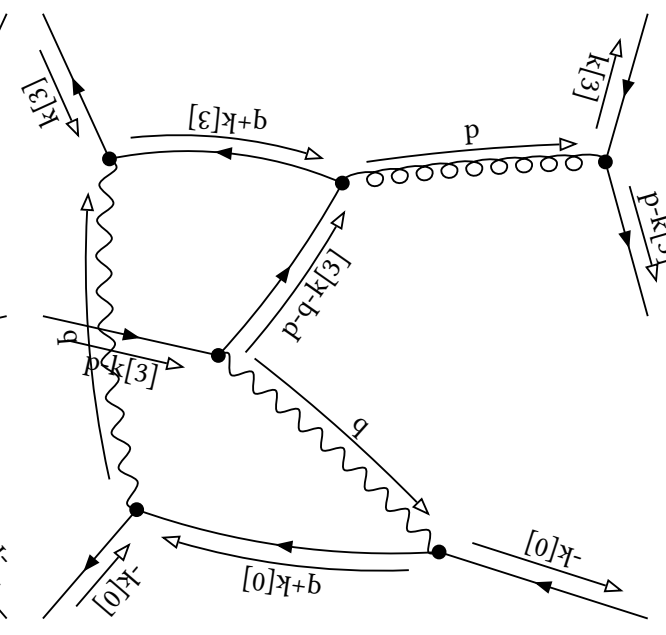
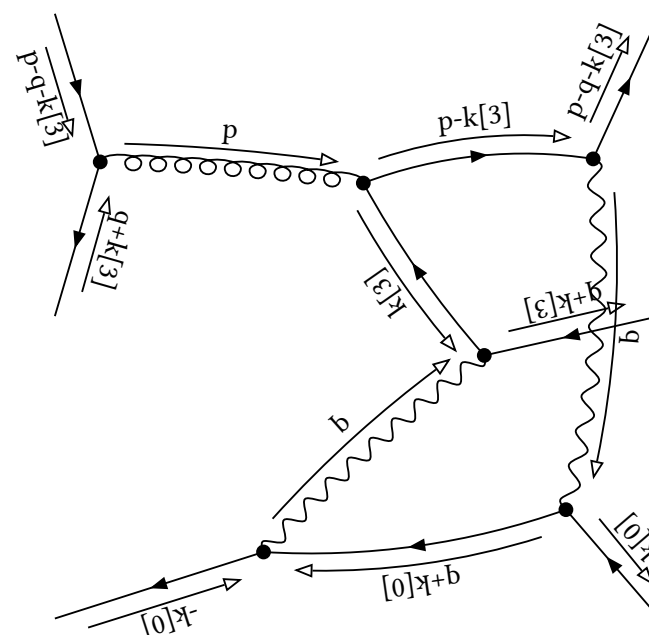
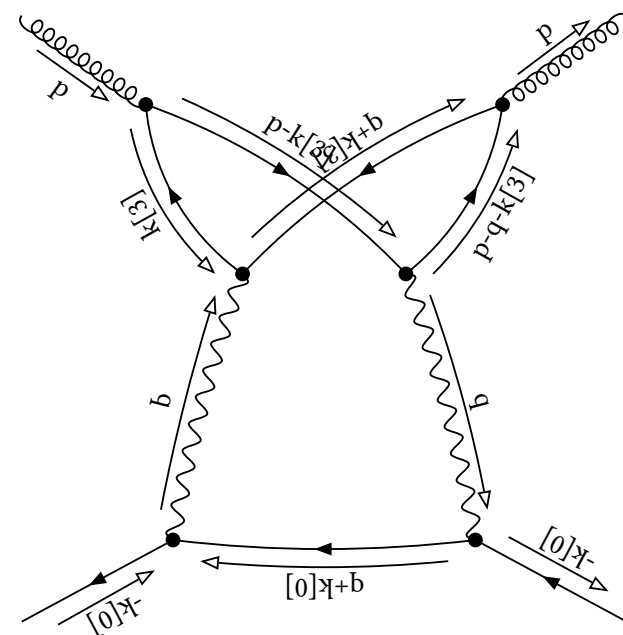
initial

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:

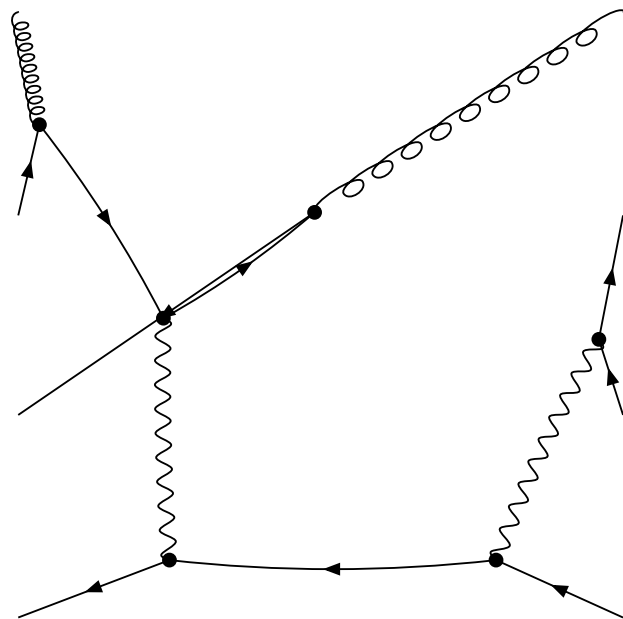
$$\begin{aligned} & -1/2 \operatorname{prop}[0, k[3]]^{-1} \operatorname{prop}[0, q+k[3]]^{-1} \operatorname{prop}[0, p-k[3]]^{-1} \operatorname{dot}[p, p]^{-1} \operatorname{dot}[p, q]^{-1} \\ & +1/2 \operatorname{prop}[0, k[3]]^{-1} \operatorname{prop}[0, q+k[3]]^{-1} \operatorname{prop}[0, p-q-k[3]]^{-1}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



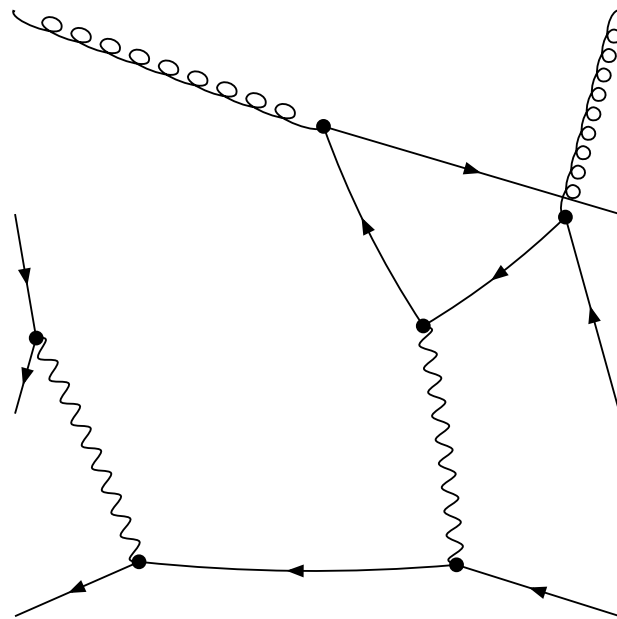
final

Denominator:

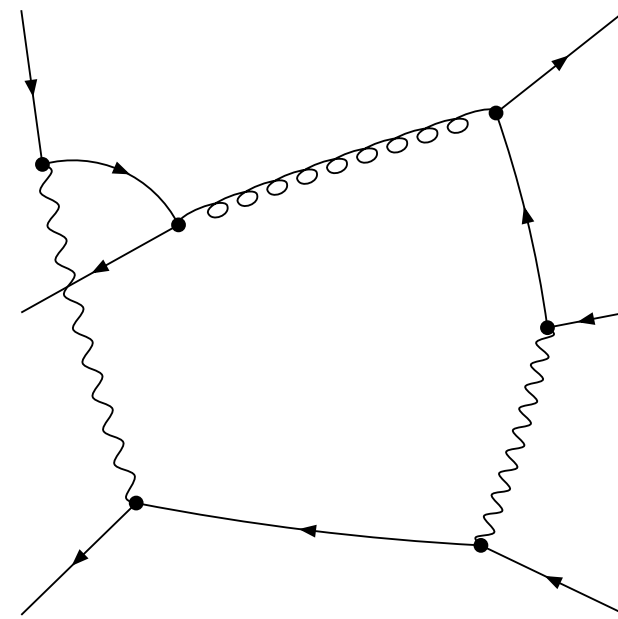
$$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p-q]^{-1} \text{prop}[0,p-q-k[3]]^{-1} \text{prop}[0,p-2q-k[3]]^{-1}$$



$$-1+8-14+17$$



$$-1-11+13+17$$



$$-1+8+13$$

embedding 4 [1, -1, -1, 0]

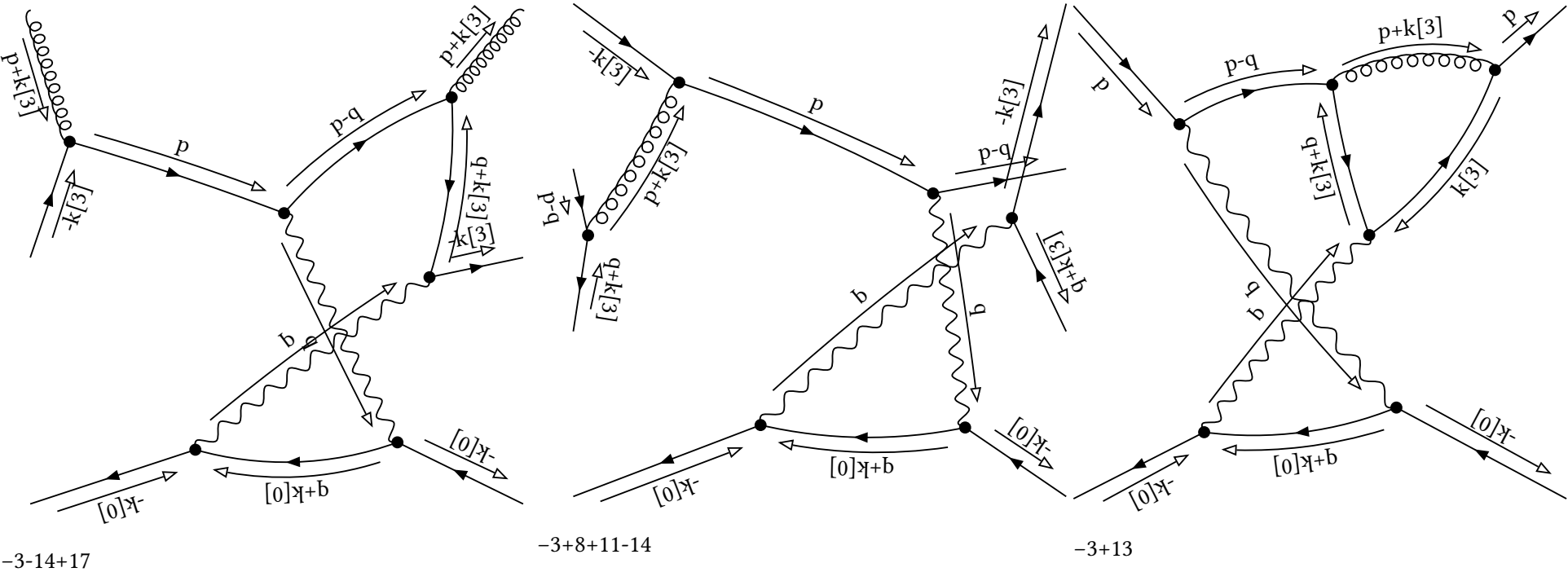
initial

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:

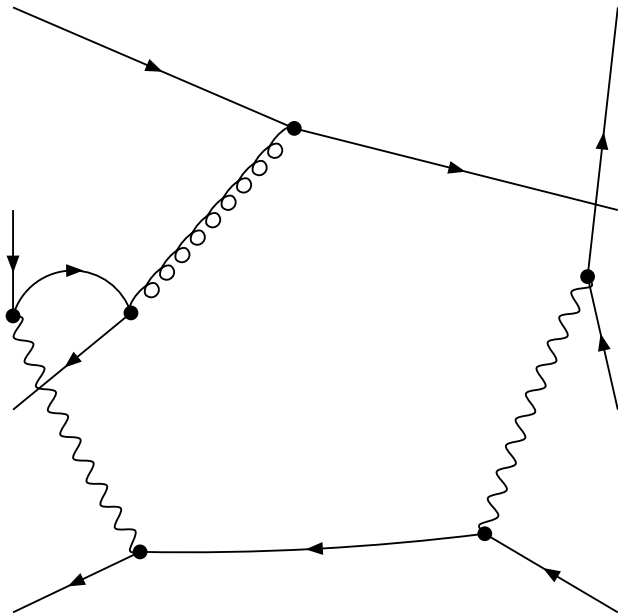
$(\text{dot}[p,p]-2 \text{dot}[p,q]+\text{dot}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,p+k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{dot}[p,p]^{-1}$



final

Denominator:

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



$-1+8+13-14$

embedding 5 [1, -1, 0, -1]

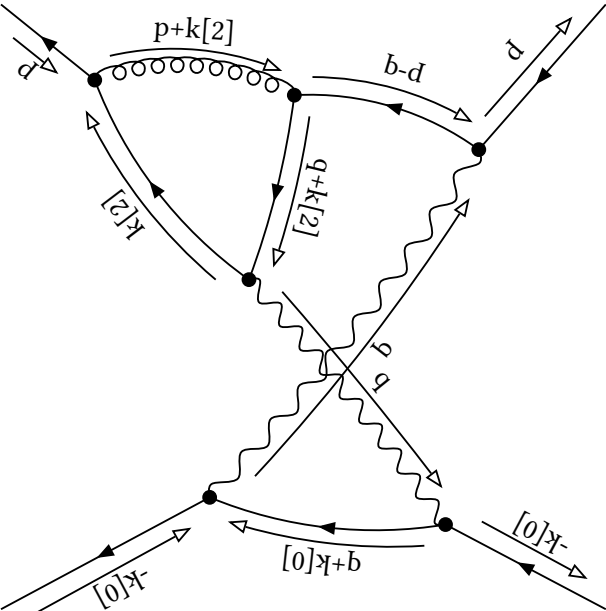
initial

Denominator:

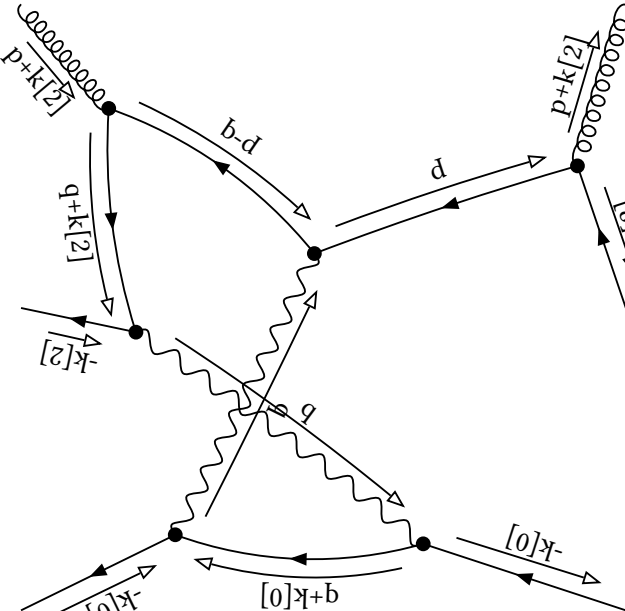
$\text{prop}[0,p]^{-1} \text{prop}[0,k[2]]^{-1} \text{prop}[0,p+k[2]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,p-q]^{-1}$

Partial Fractioned Denominator:

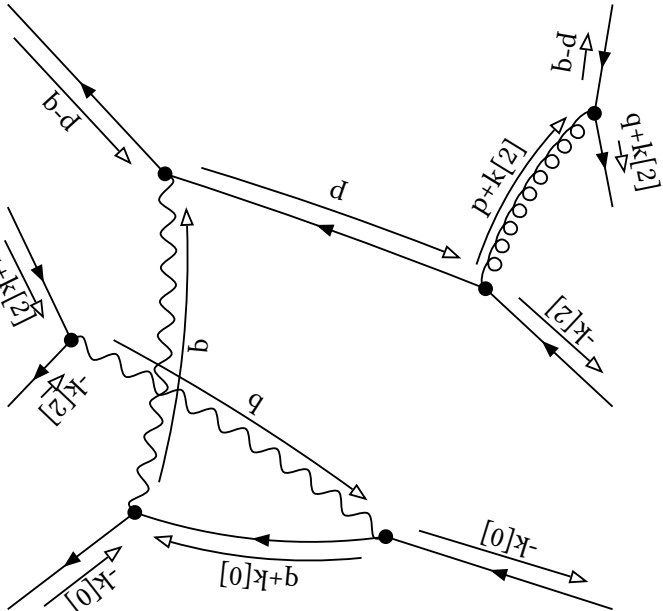
$(\text{dot}[p,p]-2 \text{dot}[p,q]+\text{dot}[q,q])^{-1} \text{prop}[0,k[2]]^{-1} \text{prop}[0,p+k[2]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{dot}[p,p]^{-1}$



-3+8



-3-11+17

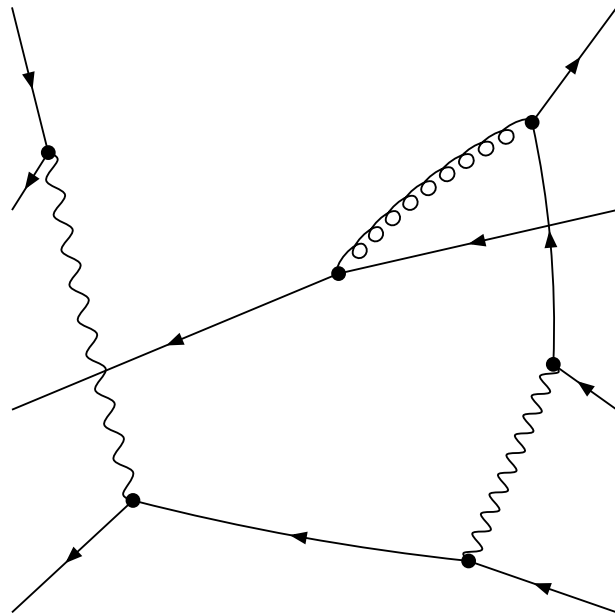


-3-11+13+14

final

Denominator:

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



$-1+8-11+13$

embedding 6 [1, 0, -2, 1]

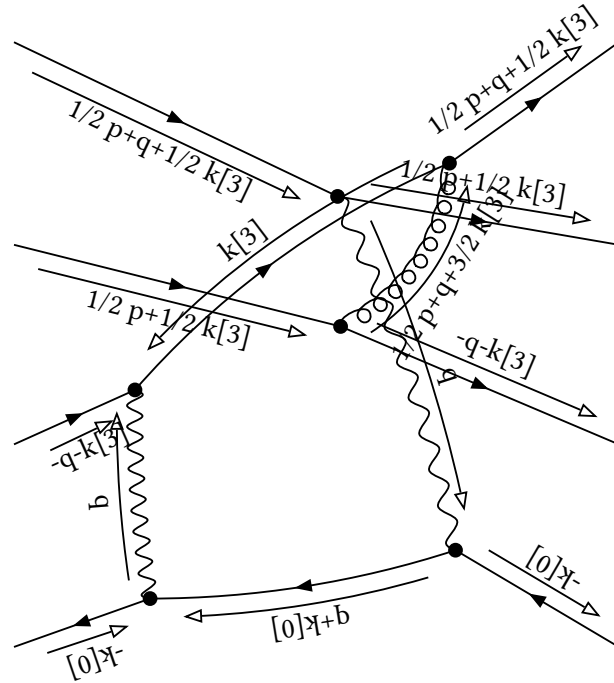
initial

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} \\ & + 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} \\ & - 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}$$

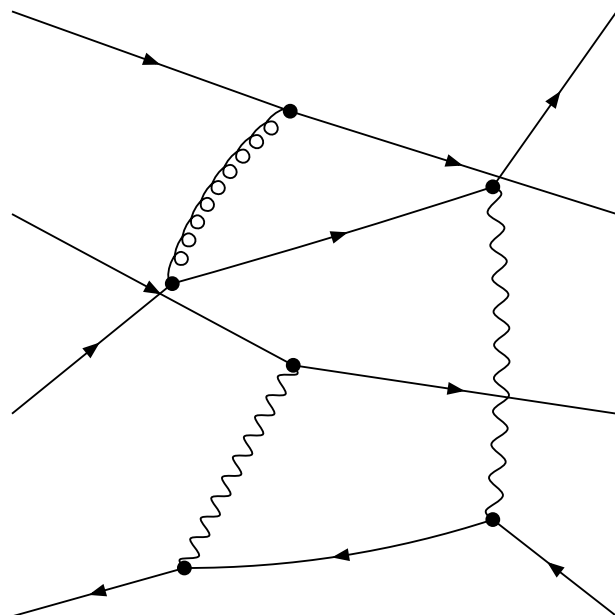


$$-3-8+11+13$$

final

Denominator:

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



$-1+11+13-14$

embedding 7 $[1, 0, -1, -1]$

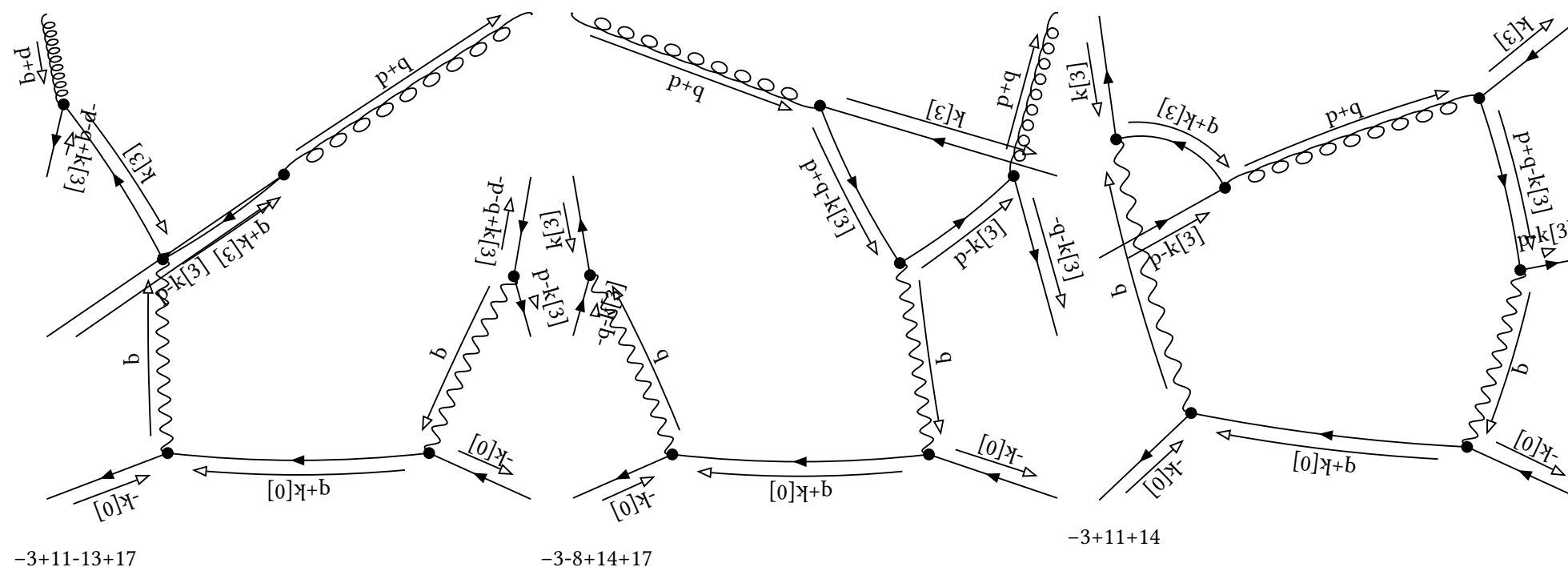
initial

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:

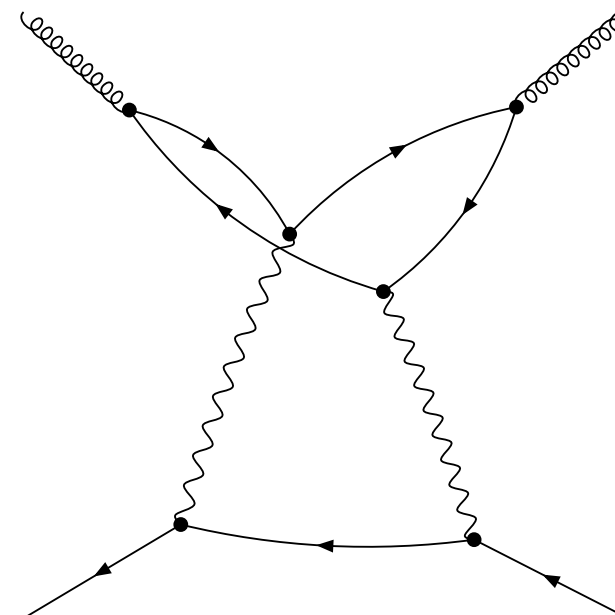
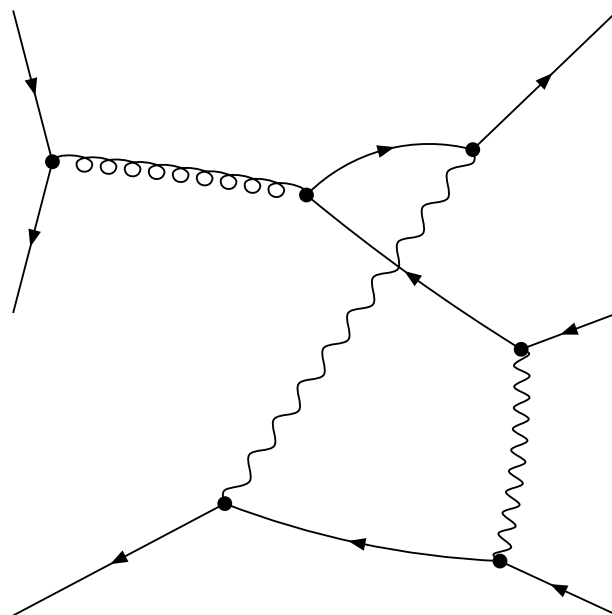
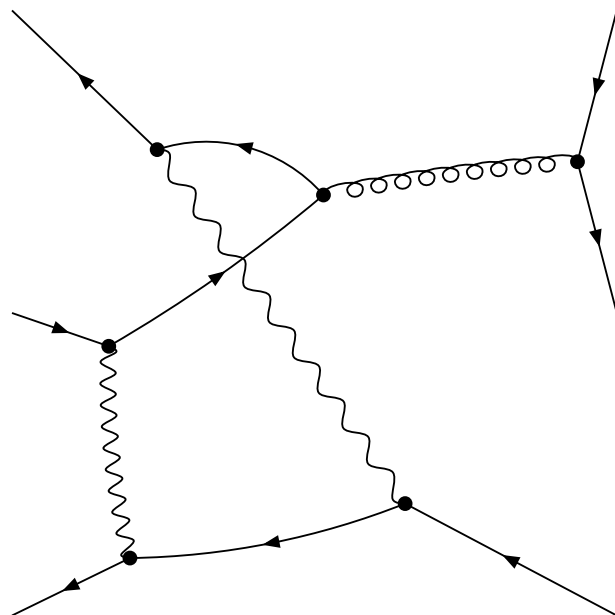
$$\begin{aligned} & -(-2 \operatorname{dot}[p, q] - 2 \operatorname{dot}[q, q])^{-1} (\operatorname{dot}[p, p] + 2 \operatorname{dot}[p, q] + \operatorname{dot}[q, q])^{-1} \operatorname{prop}[0, k[3]]^{-1} \operatorname{prop}[0, q+k[3]]^{-1} \operatorname{prop}[0, p-k[3]]^{-1} \\ & + (-2 \operatorname{dot}[p,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



final

Denominator:

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



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

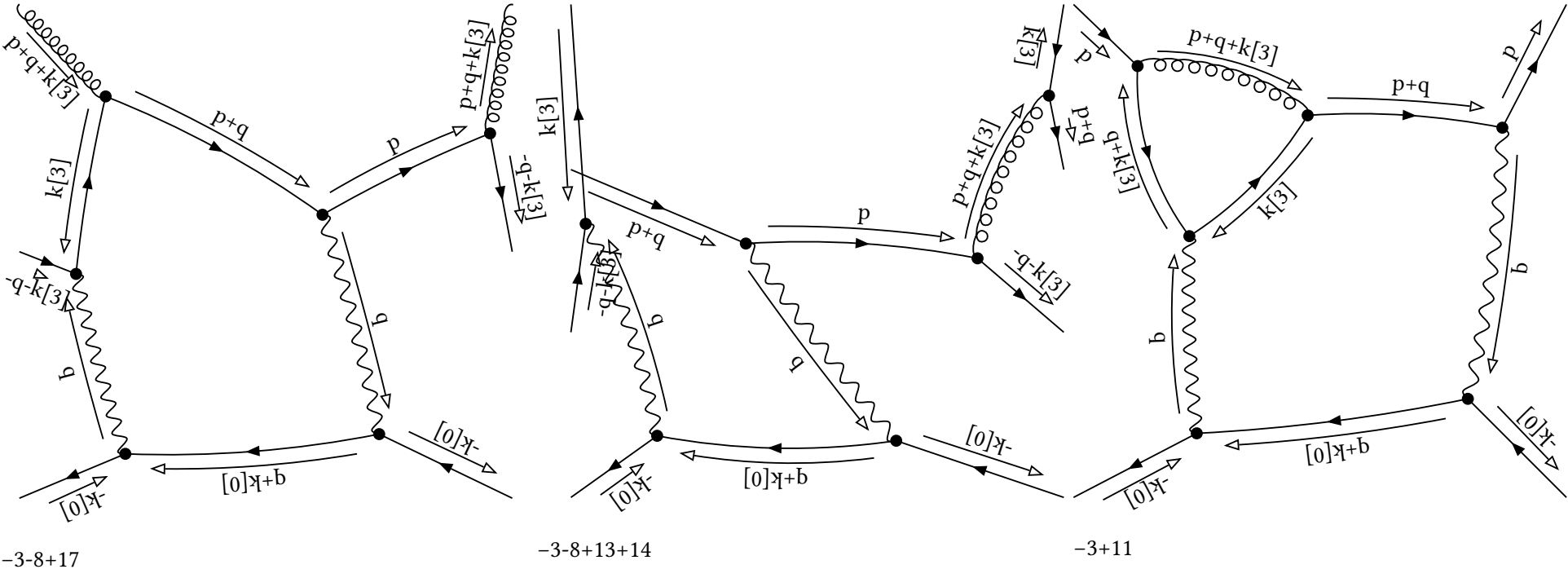
initial

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:

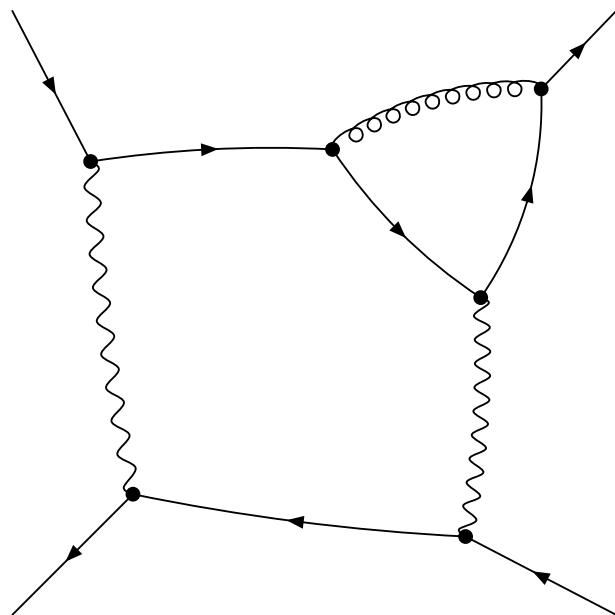
$(\text{dot}[p,p]+2 \text{dot}[p,q]+\text{dot}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+q+k[3]]^{-1} \text{dot}[p,p]^{-1}$



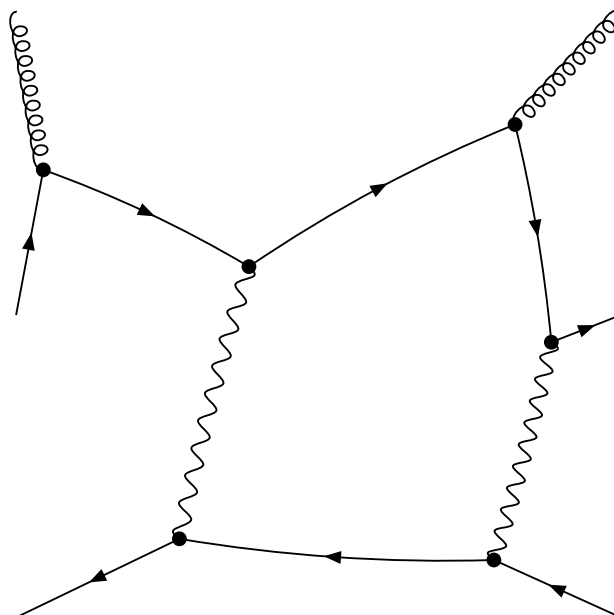
final

Denominator:

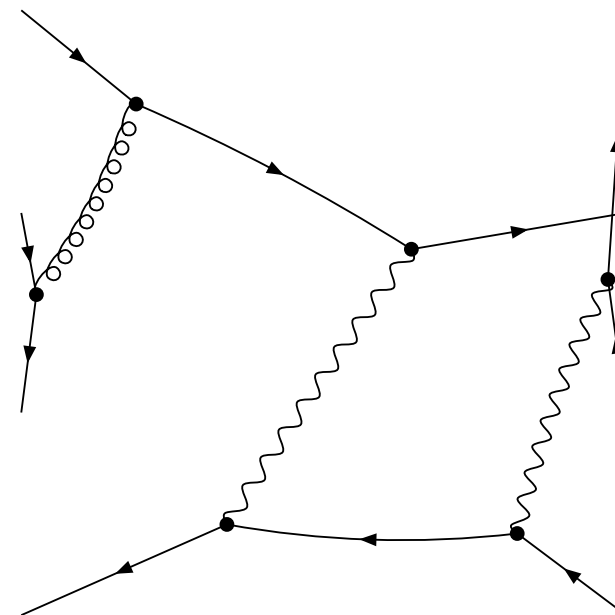
$\text{prop}[0,p]^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,p+k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p-q]^{-1}$



-1+13



-1-14+17



-1+8+11-14

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

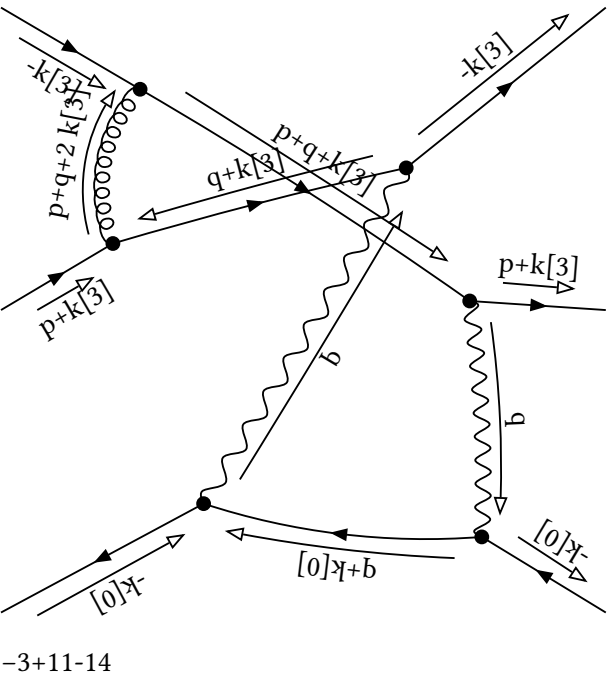
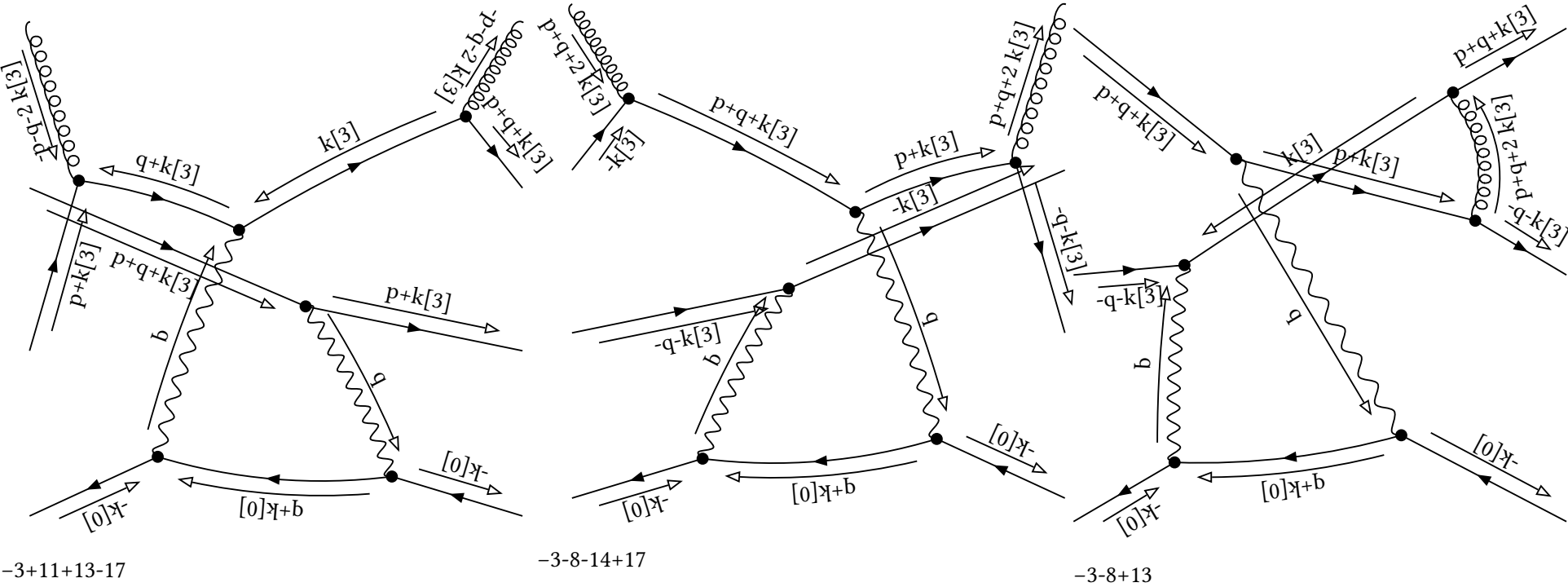
initial

Denominator:

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

Partial Fractioned Denominator:

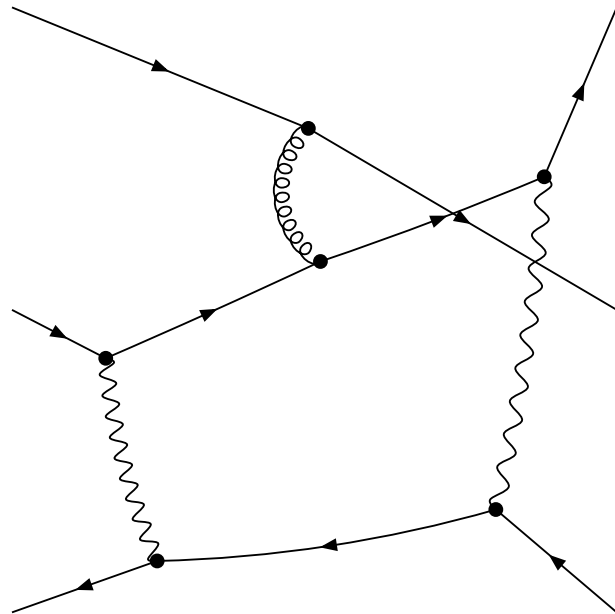
$$\begin{aligned} & -1/2 \left(-\text{dot}[p,p]-2 \text{dot}[p,q]-\text{dot}[q,q] \right)^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,p+k[3]]^{-1} \text{prop}[0,p+q+k[3]]^{-1} \text{dot}[p,q]^{-1} \\ & + \left(-\text{dot}[p,p]-2 \text{dot}[p,q]-\text{dot}[q,q] \right)^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,p+k[3]]^{-1}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



final

Denominator:

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



-1+13-14

embedding 10 [1, 0, 0, -1]

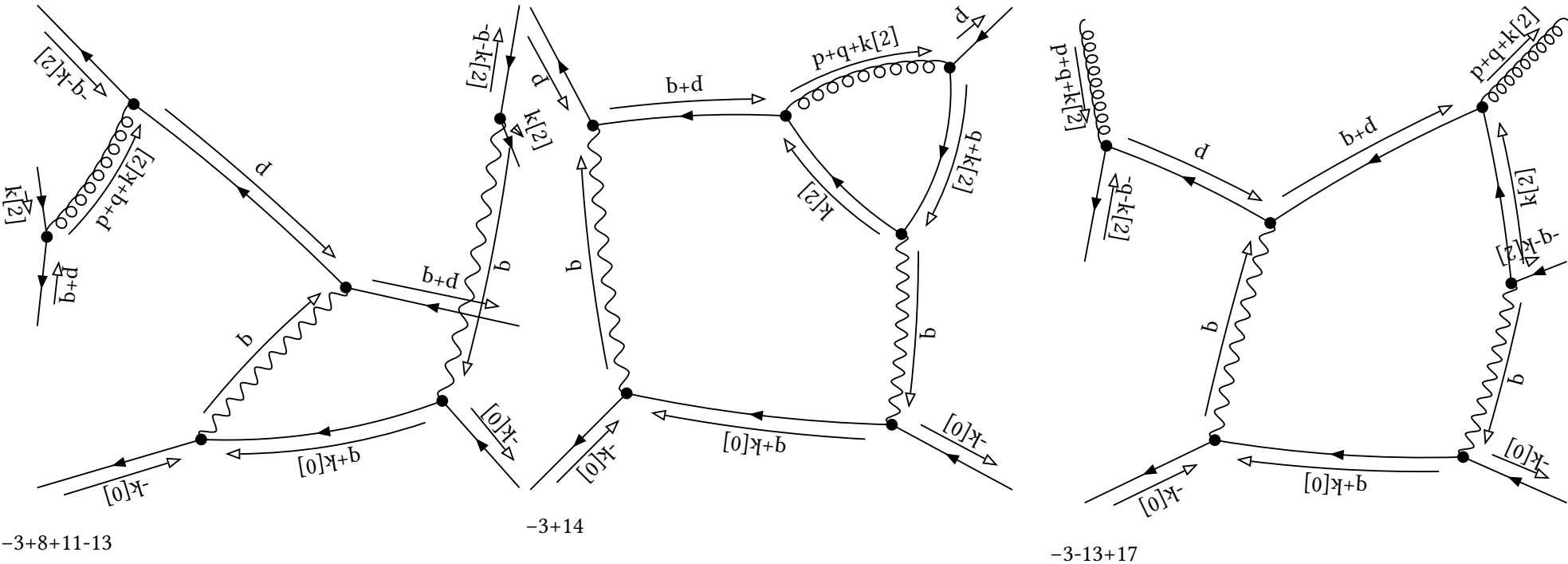
initial

Denominator:

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

Partial Fractioned Denominator:

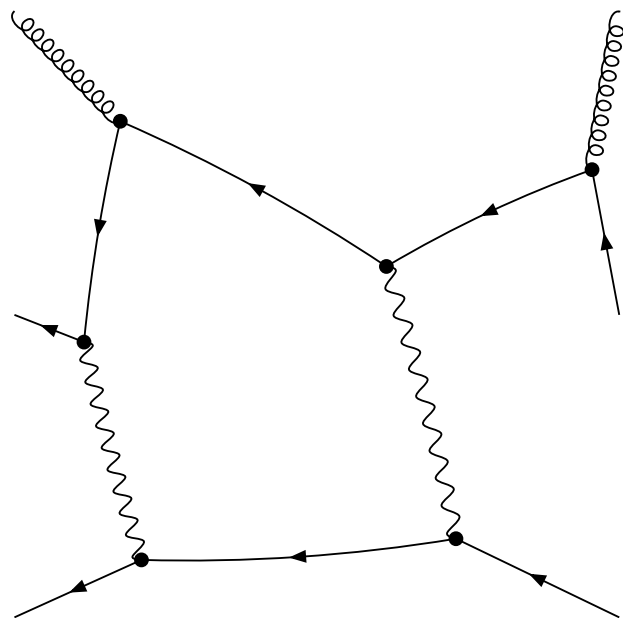
$(\text{dot}[p,p]+2 \text{dot}[p,q]+\text{dot}[q,q])^{-1} \text{prop}[0,k[2]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,p+q+k[2]]^{-1} \text{dot}[p,p]^{-1}$



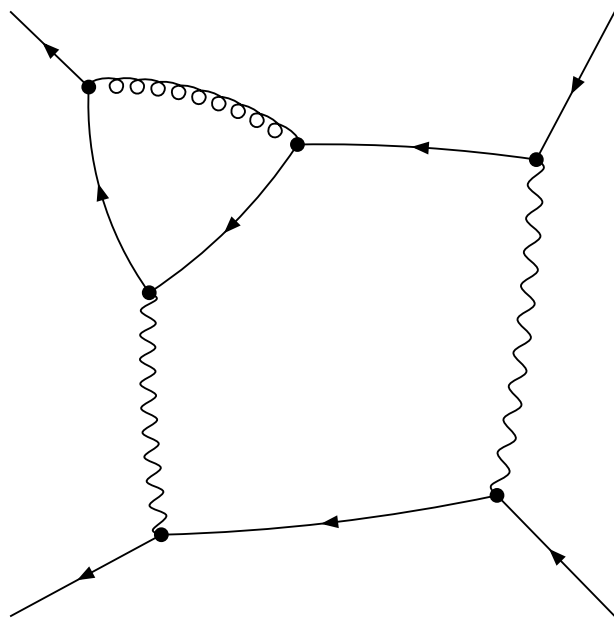
final

Denominator:

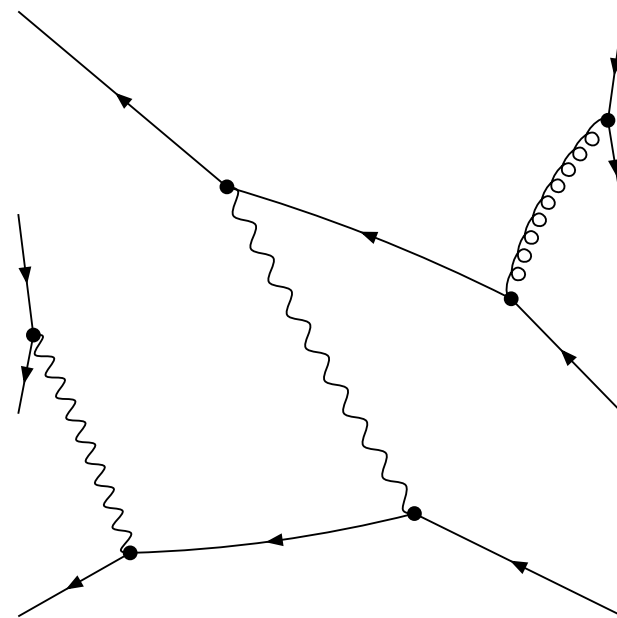
$\text{prop}[0,p]^{-1} \text{prop}[0,k[2]]^{-1} \text{prop}[0,p+k[2]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,p-q]^{-1}$



$-1-11+17$



$-1+8$



$-1-11+13+14$

embedding 11 [1, 0, 0, 0]

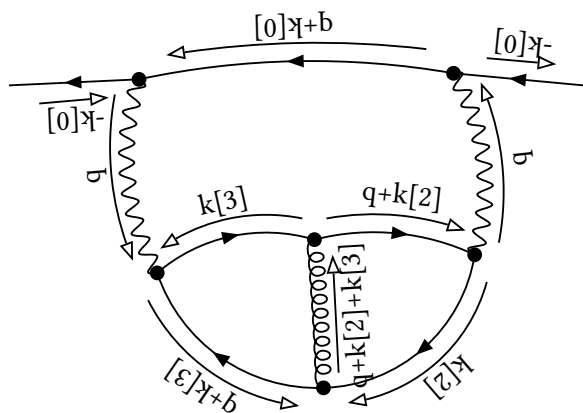
initial

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:

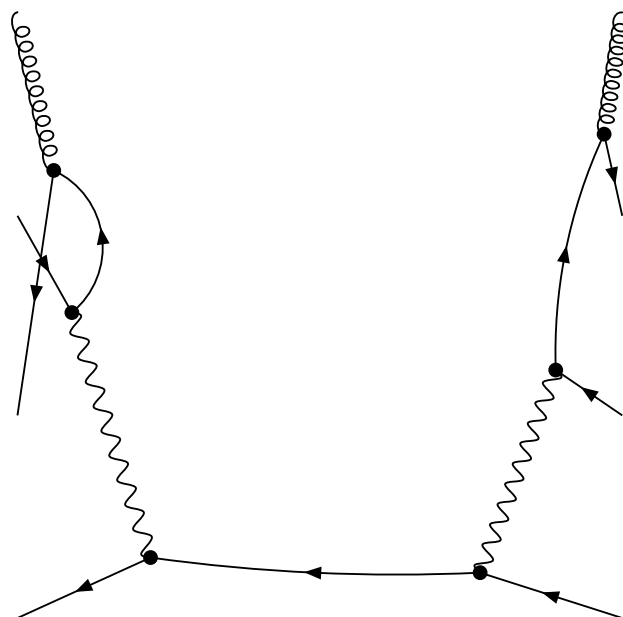
$$\text{prop}[0, k[2]]^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[2]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, q+k[2]+k[3]]^{-1}$$



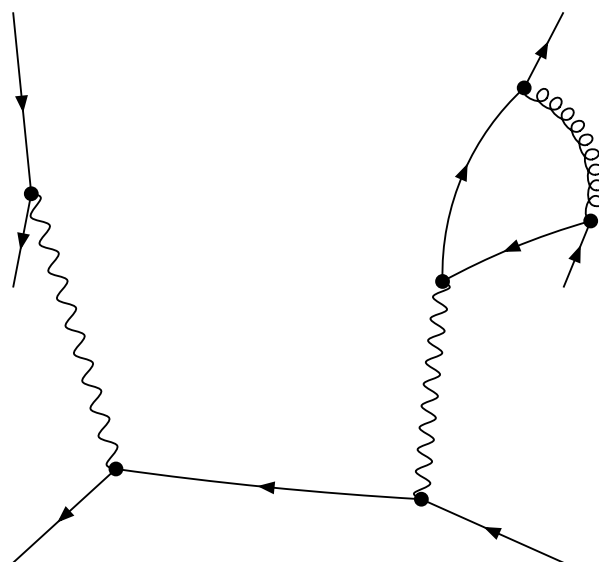
final

Denominator:

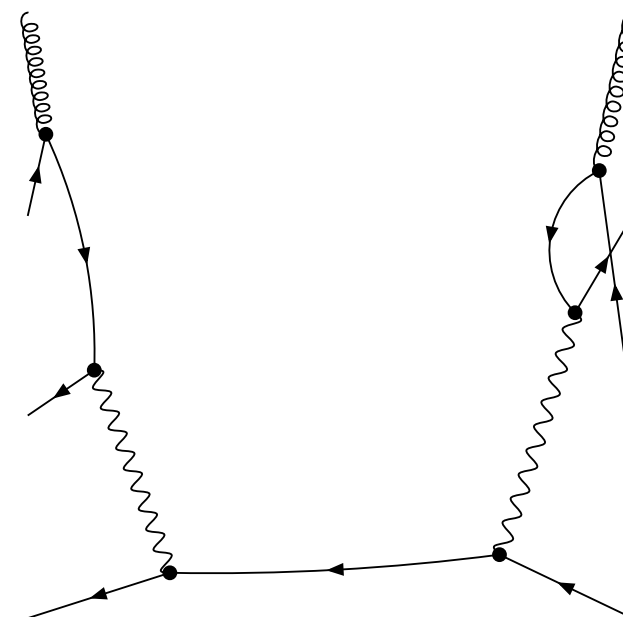
$$\text{prop}[0,k[2]]^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,q+k[2]+k[3]]^{-1}$$



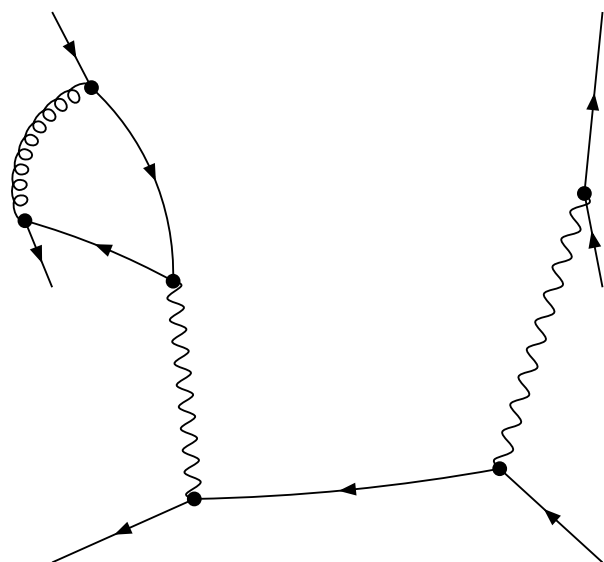
$$-1+8+13-17$$



$$-1-11+13$$



$$-1-11-14+17$$



$$-1+8-14$$

embedding 12 [1, 0, 0, 1]

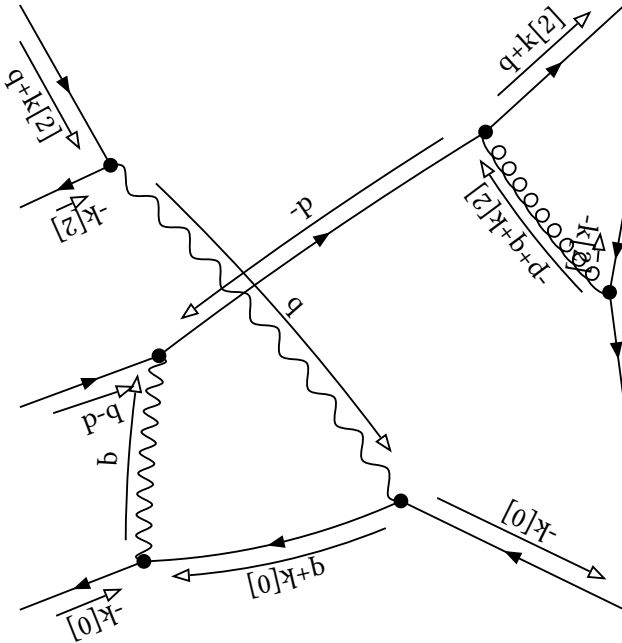
initial

Denominator:

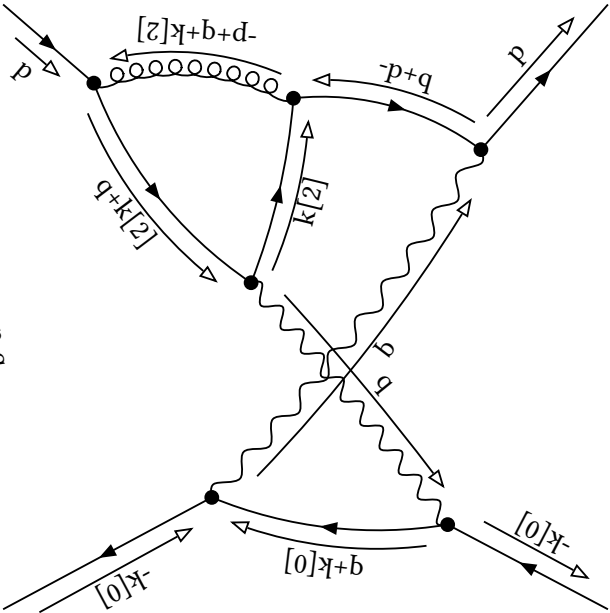
$\text{prop}[0,k[2]]^{-1} \text{prop}[0,-p]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,-p+q]^{-1} \text{prop}[0,-p+q+k[2]]^{-1}$

Partial Fractioned Denominator:

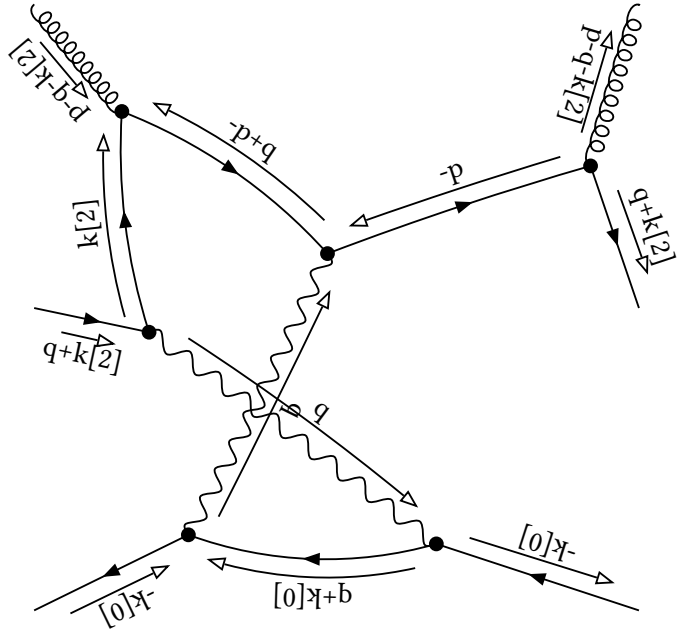
$(\text{dot}[p,p]-2 \text{dot}[p,q]+\text{dot}[q,q])^{-1} \text{prop}[0,k[2]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,-p+q+k[2]]^{-1} \text{dot}[p,p]^{-1}$



-3-8-11+13



-3-14

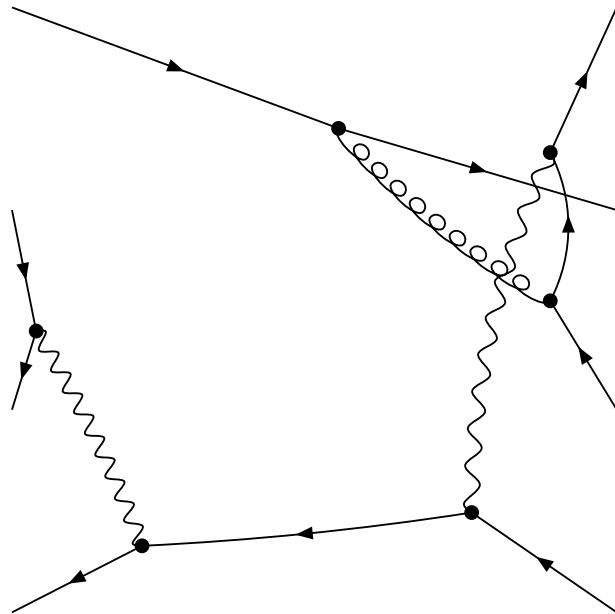


-3+13-17

final

Denominator:

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



$$-1-11+13-14$$

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

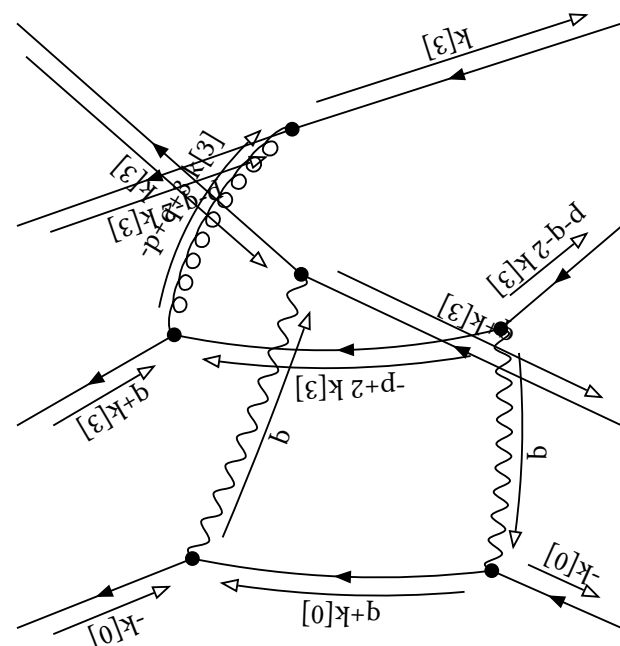
initial

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:

[illegible]

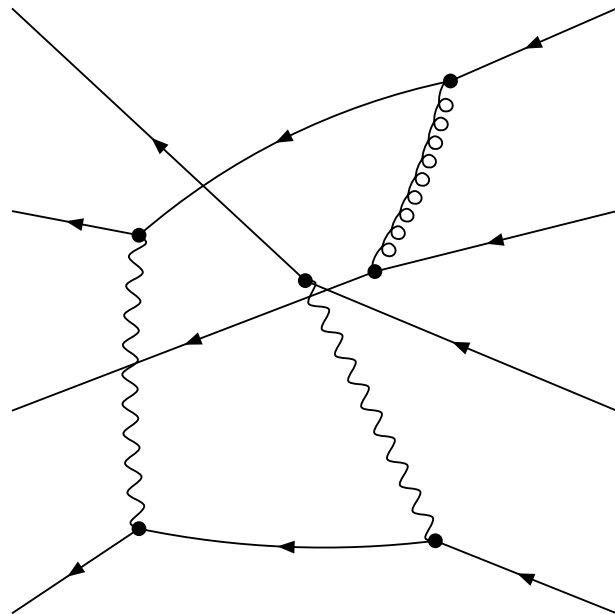


$$-3+8-13+14$$

final

Denominator:

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



$-1+8-11+14$

embedding 14 [1, 0, 1, -1]

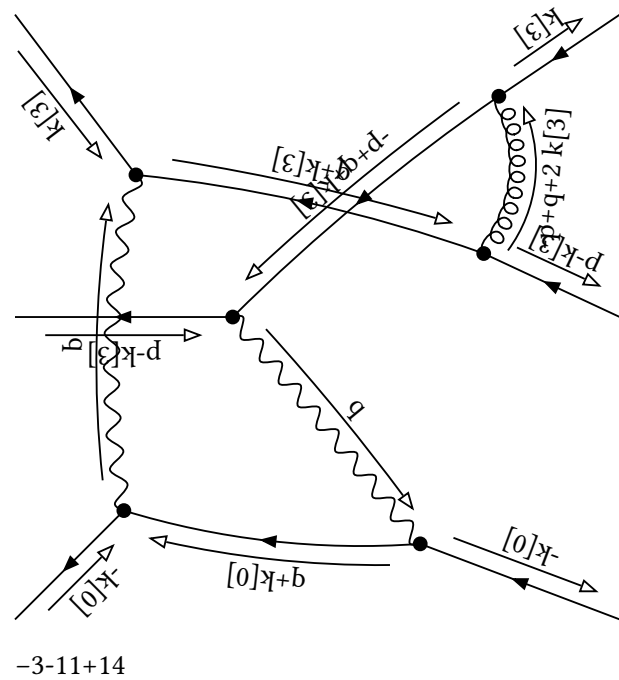
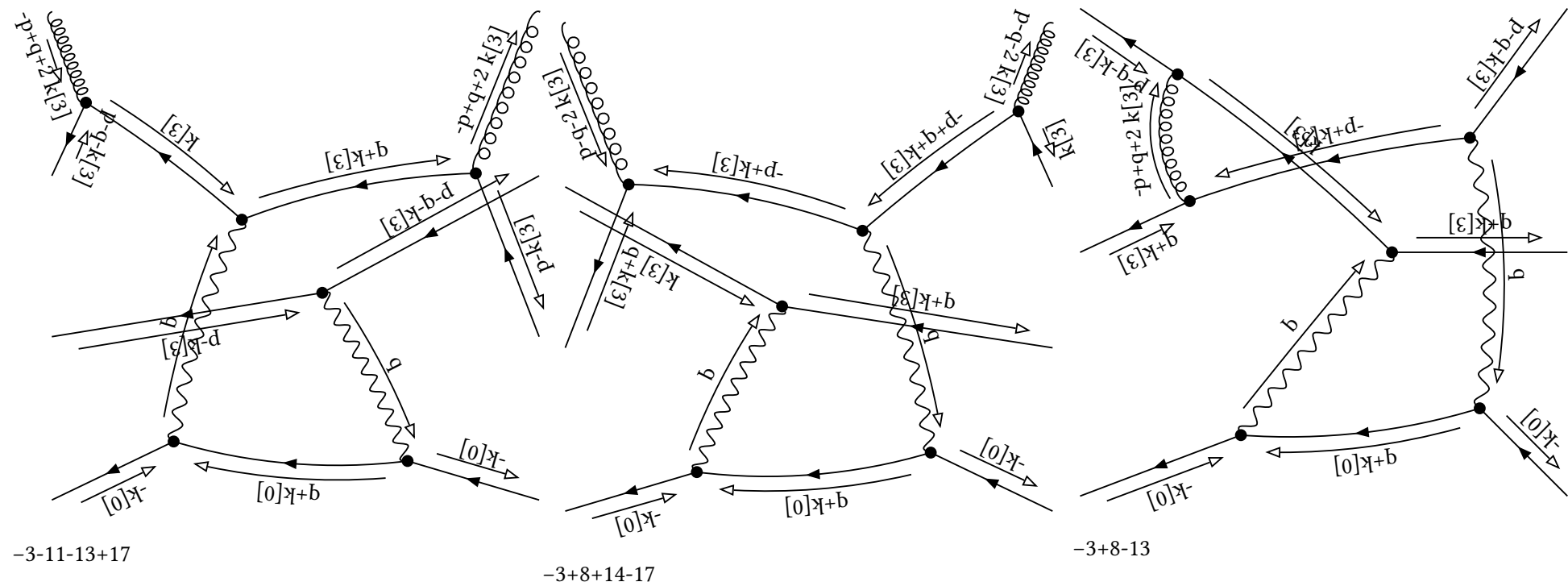
initial

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:

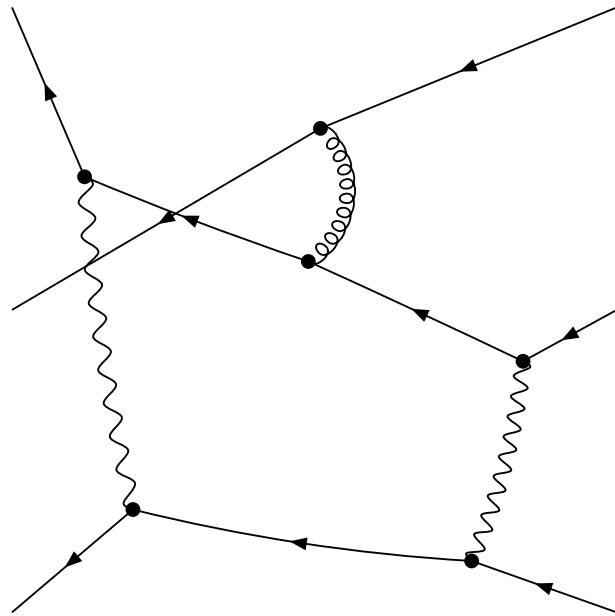
$$\begin{aligned} & -1/2 (-\text{dot}[p, p] - 2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+k[3]]^{-1} \text{dot}[p, q]^{-1} \\ & + (-\text{dot}[p, p] - 2 \text{dot}[p, q] - \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0,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



final

Denominator:

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

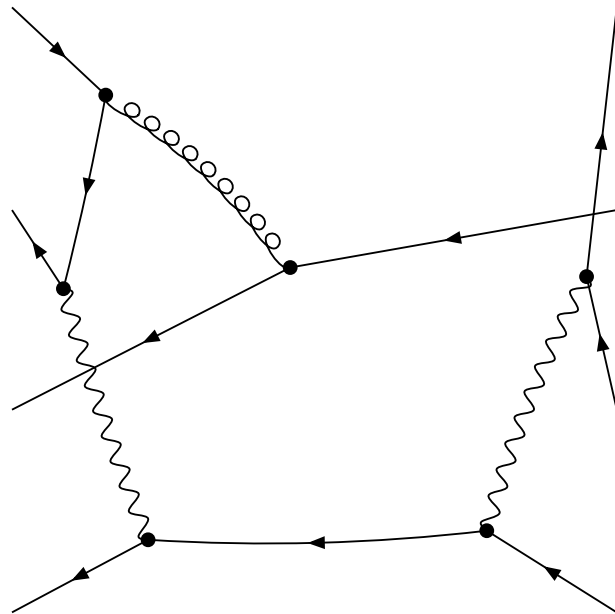


-1+8-11

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+8-11-14

embedding 16 [1, 1, -1, 0]

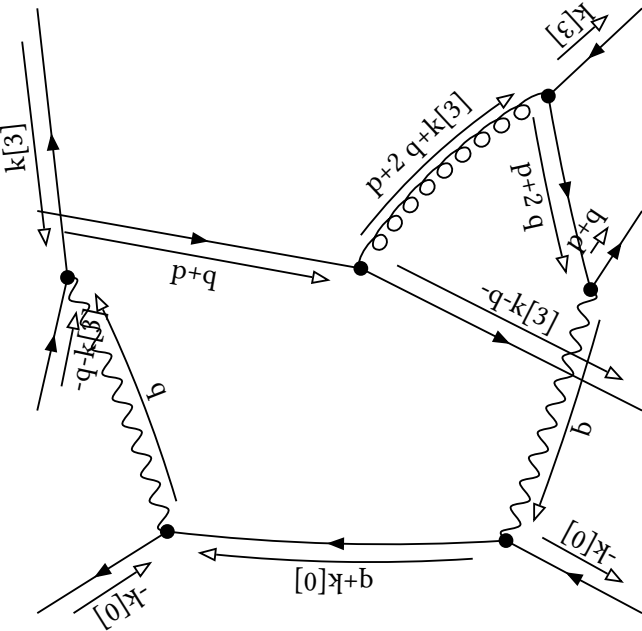
initial

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:

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

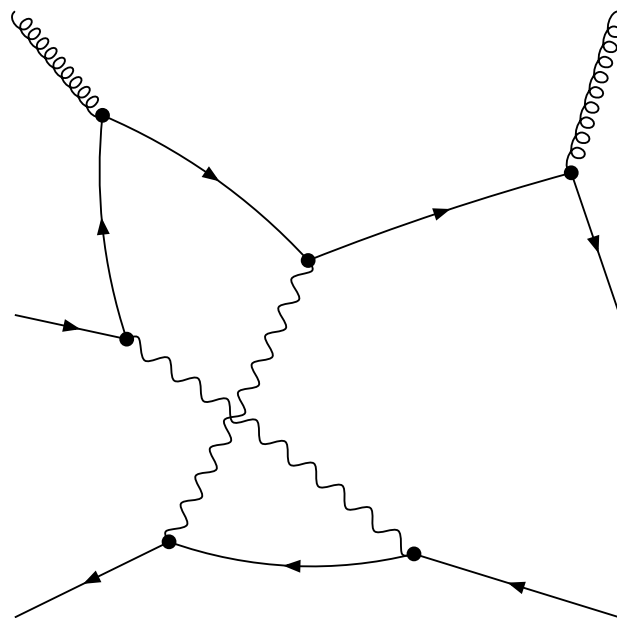


$-3-8+11+14$

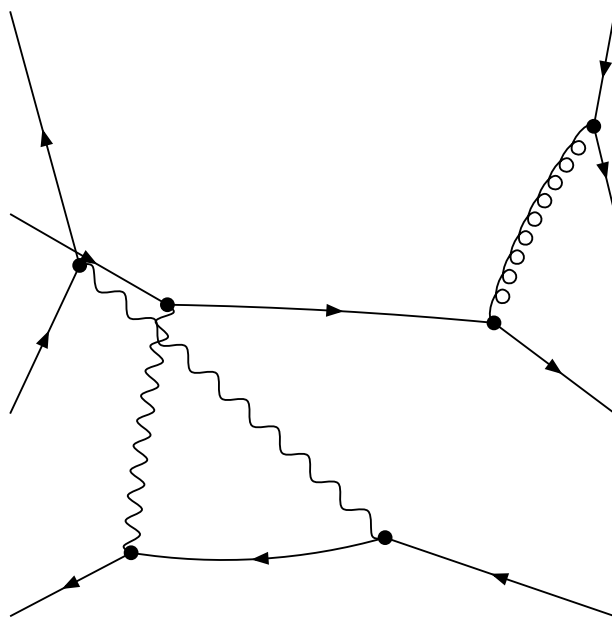
final

Denominator:

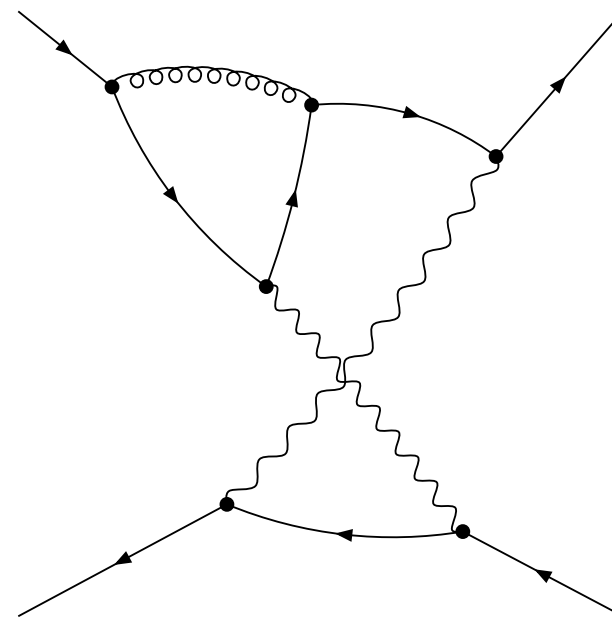
$\text{prop}[0,p]^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,p+q]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+q+k[3]]^{-1}$



-1-8+17



-1-8+13+14



-1+11

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

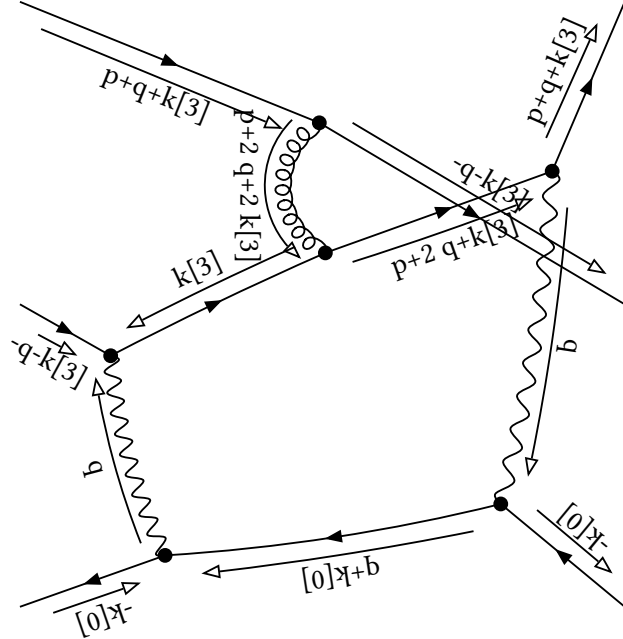
initial

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:

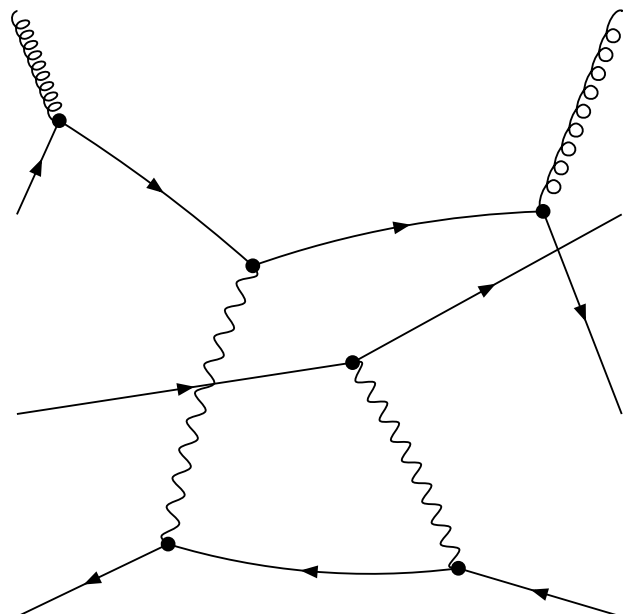
$$\begin{aligned} & -(2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} (-\text{dot}[p, p] - 4 \text{dot}[p, q] - 4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, p+2 \ q+k[3]]^{-1} \\ & + 2 (2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} (-\text{dot}[p, p] - 4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



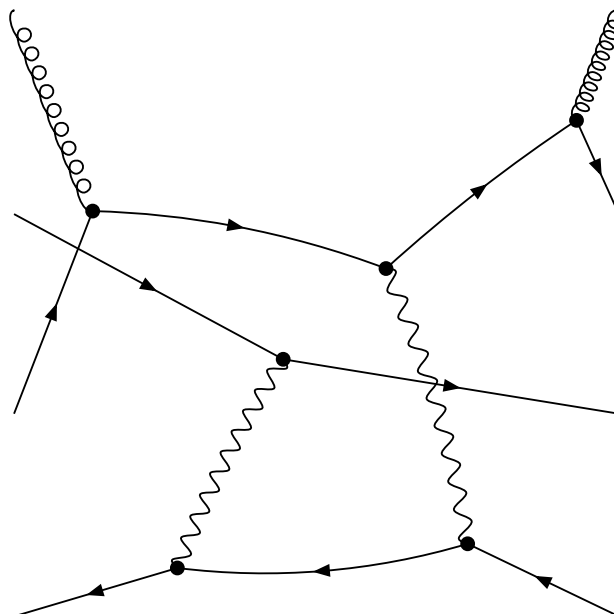
final

Denominator:

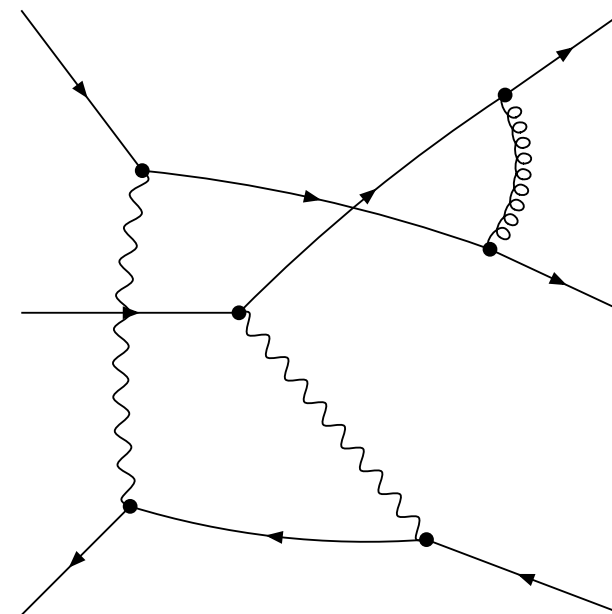
$$\text{prop}[0,k[3]]^{-1} \text{prop}[0,p+k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,p+q+k[3]]^{-1} \text{prop}[0,p+q+2\ k[3]]^{-1}$$



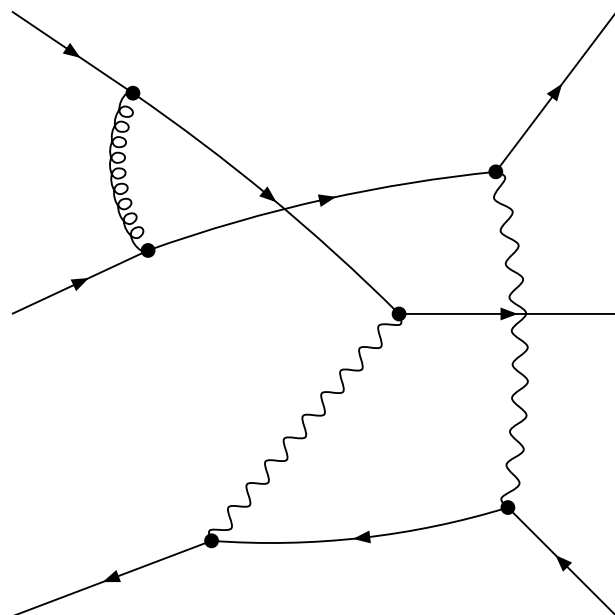
$$-1-8-14+17$$



$$-1+11+13-17$$



$$-1-8+13$$



$$-1+11-14$$

embedding 18 [1, 1, -1, 2]

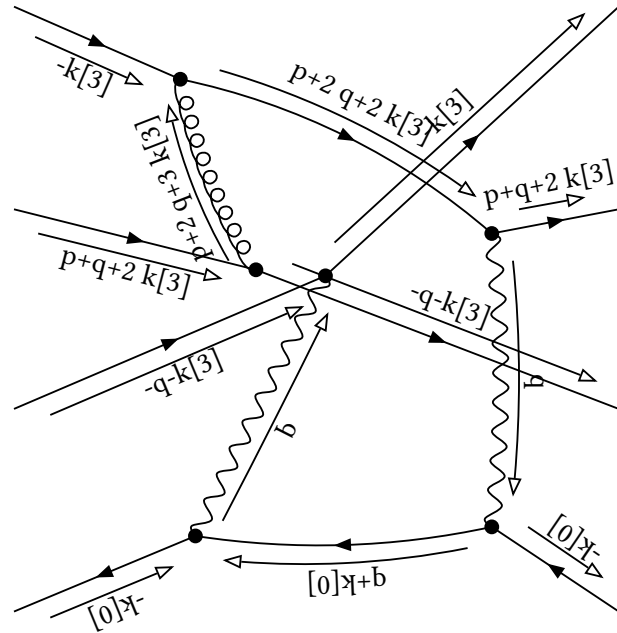
initial

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:

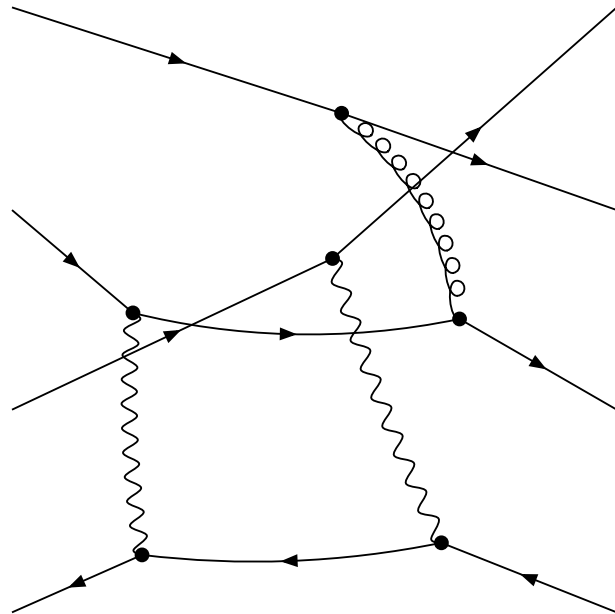
$$\begin{aligned} & -1/2 (\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p, p] - 2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, p+2 q+2 k[3]]^{-1} \\ & + 3/4 (\text{dot}[p, q] + 1/2 \text{dot}[q, q])^{-1} (-1/2 \text{dot}[p,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



final

Denominator:

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



$$-1-8+13-14$$

embedding 19 [1, 1, 0, -1]

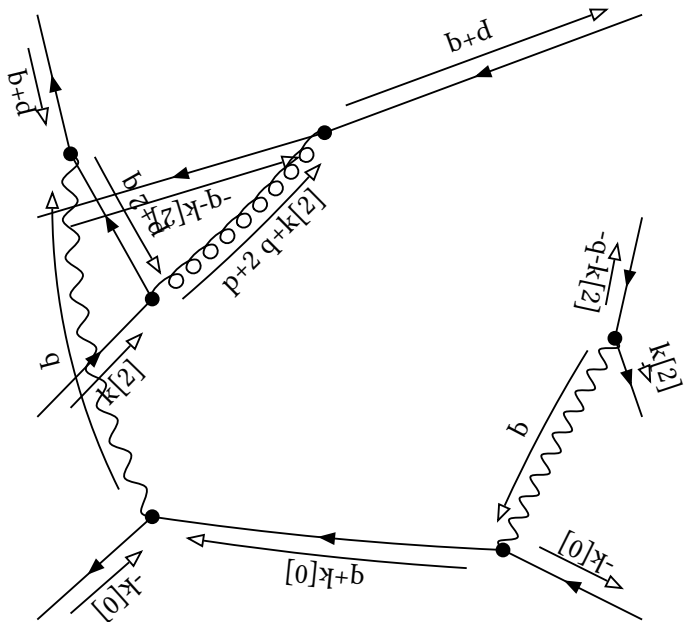
initial

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:

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

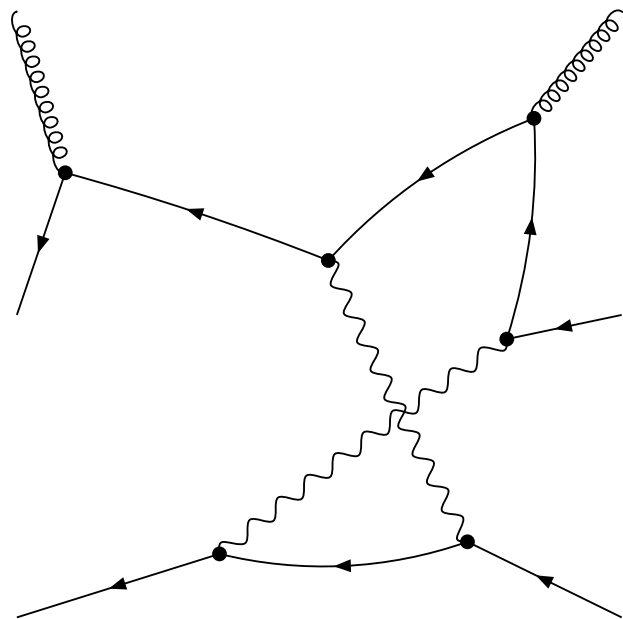


$-3+11-13+14$

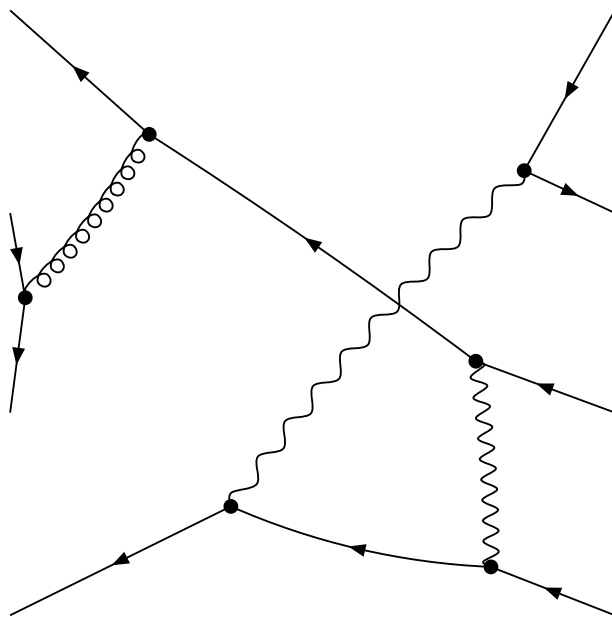
final

Denominator:

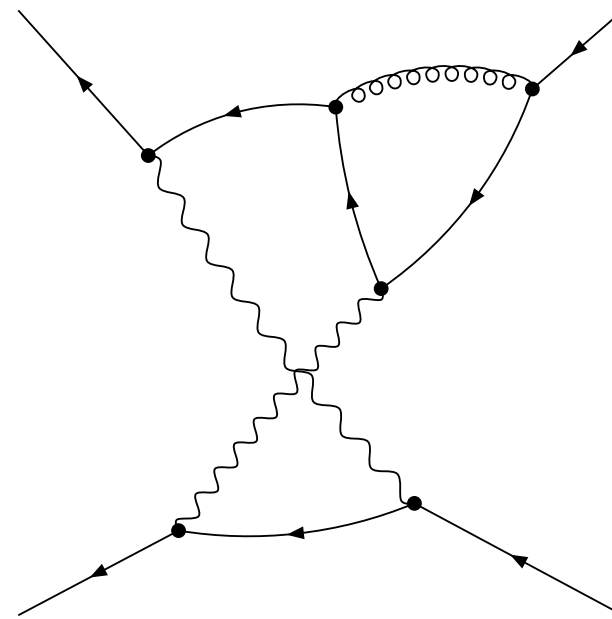
$\text{prop}[0,p]^{-1} \text{prop}[0,k[2]]^{-1} \text{prop}[0,p+q]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,p+q+k[2]]^{-1}$



-1-13+17



-1+8+11-13



-1+14

embedding 20 [1, 1, 0, 0]

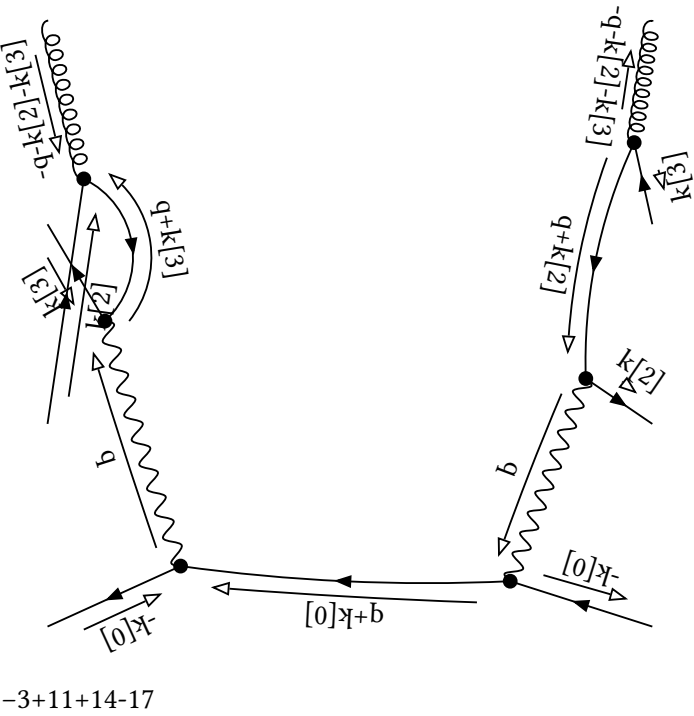
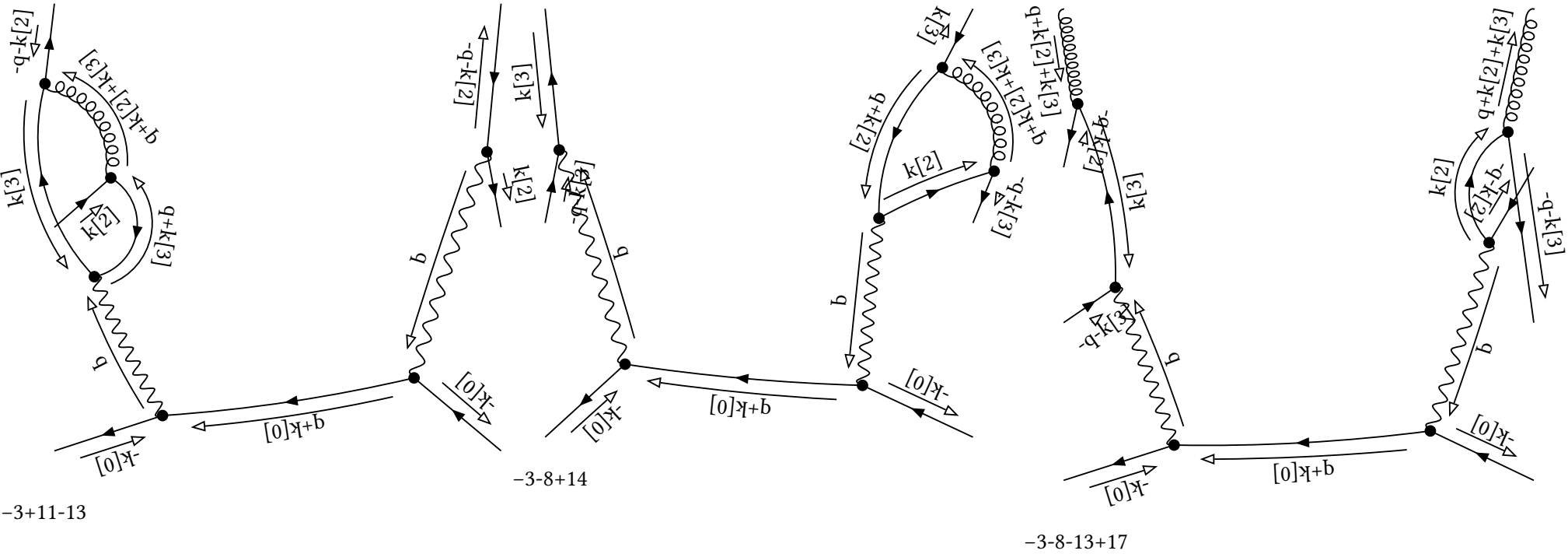
initial

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:

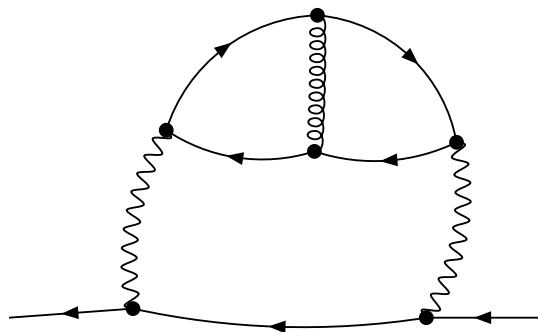
$\text{prop}[0,k[2]]^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,q+k[2]+k[3]]^{-1}$



final

Denominator:

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



-1

embedding 21 [1, 1, 0, 1]

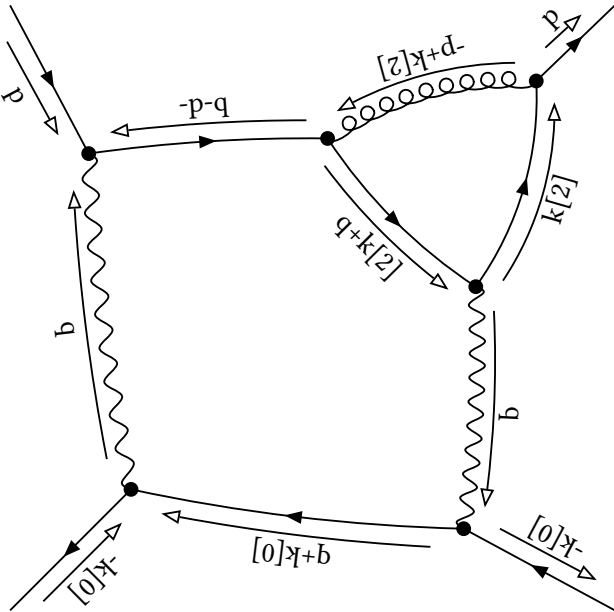
initial

Denominator:

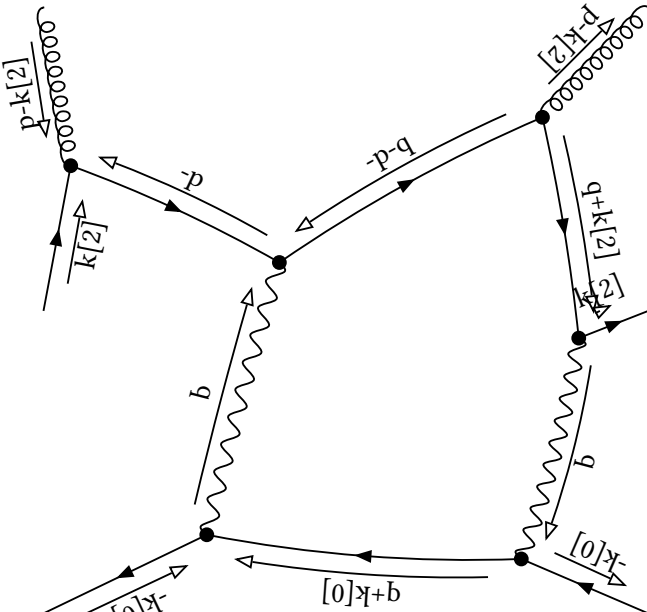
$\text{prop}[0,k[2]]^{-1} \text{prop}[0,-p]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,-p+k[2]]^{-1} \text{prop}[0,-p-q]^{-1}$

Partial Fractioned Denominator:

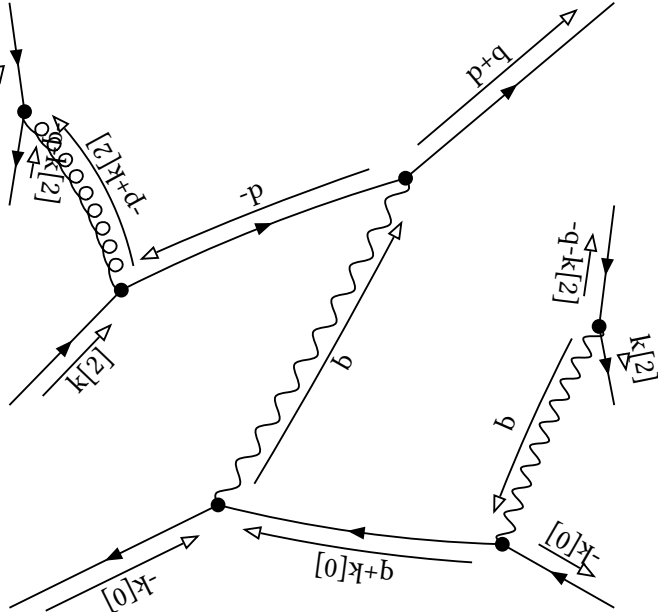
$(\text{dot}[p,p]+2 \text{dot}[p,q]+\text{dot}[q,q])^{-1} \text{prop}[0,k[2]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,-p+k[2]]^{-1} \text{dot}[p,p]^{-1}$



-3-8



-3+11-17

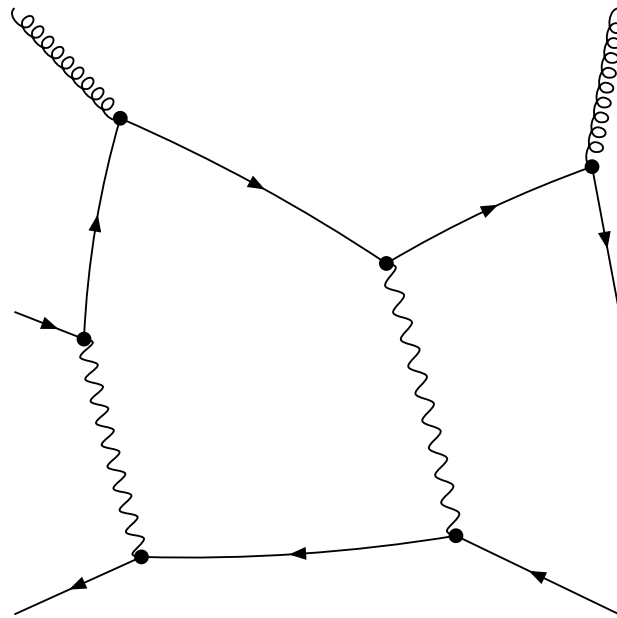


-3+11-13-14

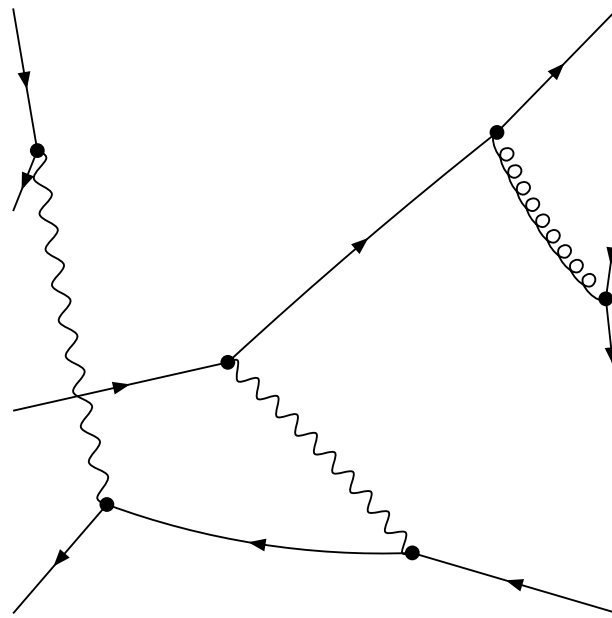
final

Denominator:

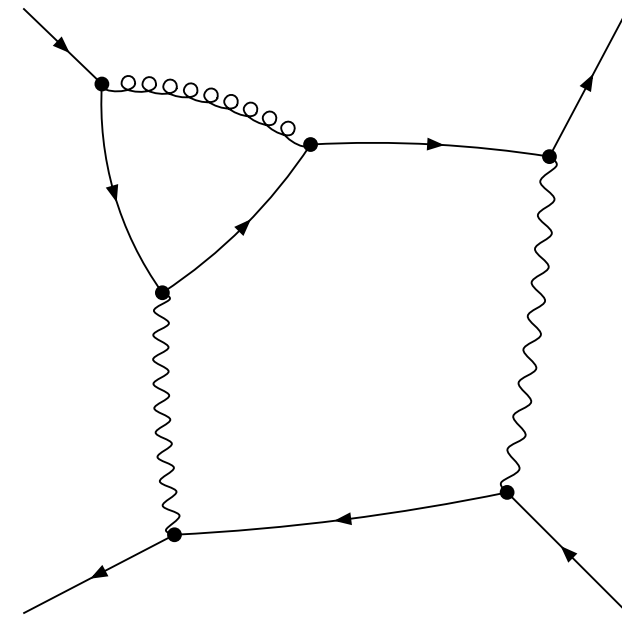
$$\text{prop}[0,k[2]]^{-1} \text{prop}[0,-p]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,-p+q]^{-1} \text{prop}[0,-p+q+k[2]]^{-1}$$



-1+13-17



-1-8-11+13



-1-14

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

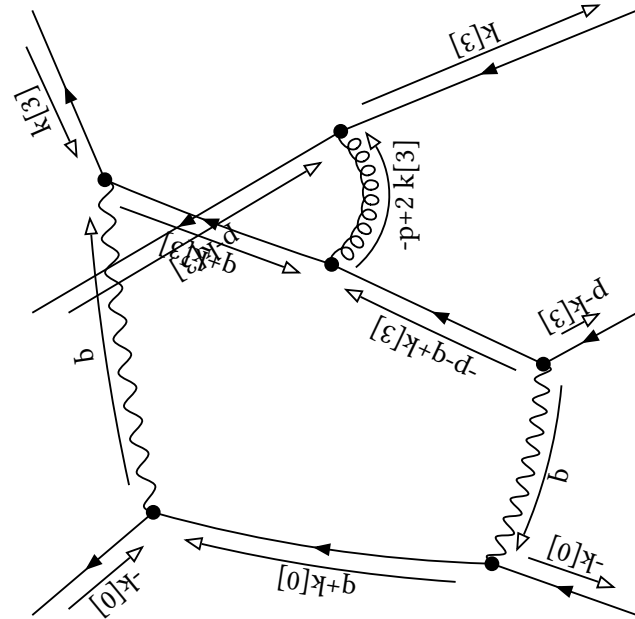
initial

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:

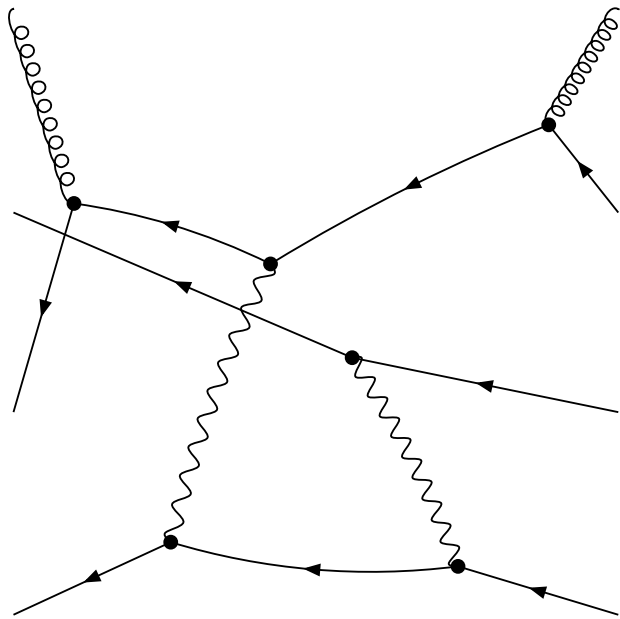
$$\begin{aligned} & -2 (-2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} (-\text{dot}[p, p] - 4 \text{dot}[p, q] - 4 \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+2 k[3]]^{-1} \\ & + (-2 \text{dot}[p, q] - 2 \text{dot}[q, q])^{-1} (-\text{dot}[p, p] - 4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



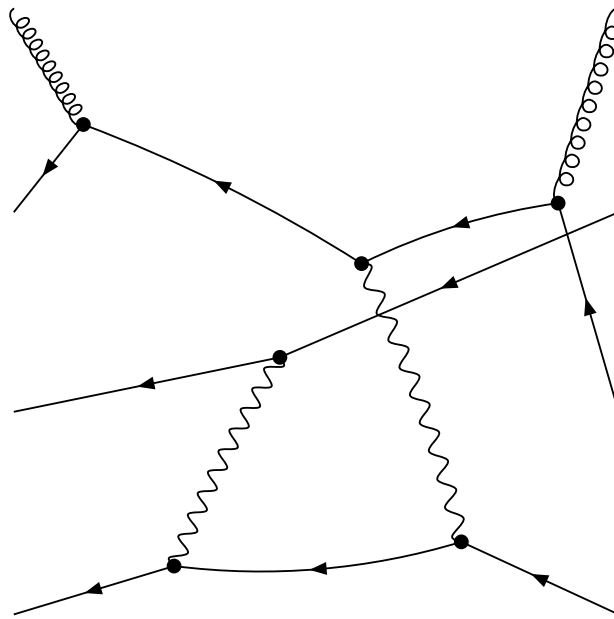
final

Denominator:

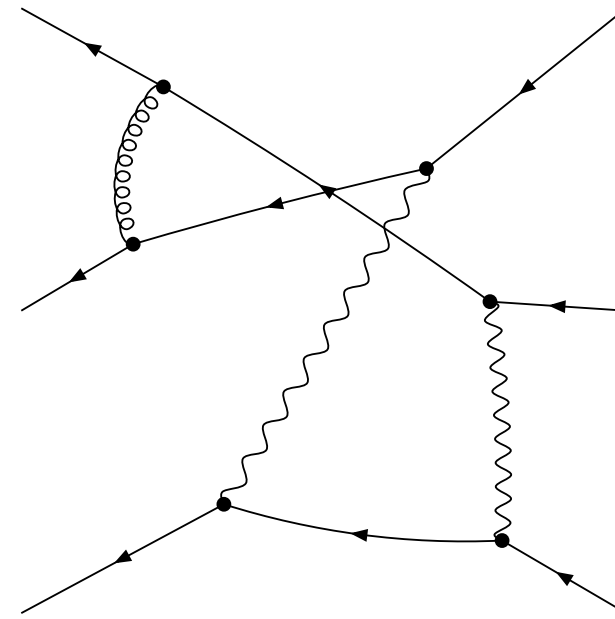
$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p+k[3]]^{-1} \text{prop}[0, -p+q+k[3]]^{-1} \text{prop}[0, -p+q+2 k[3]]^{-1}$$



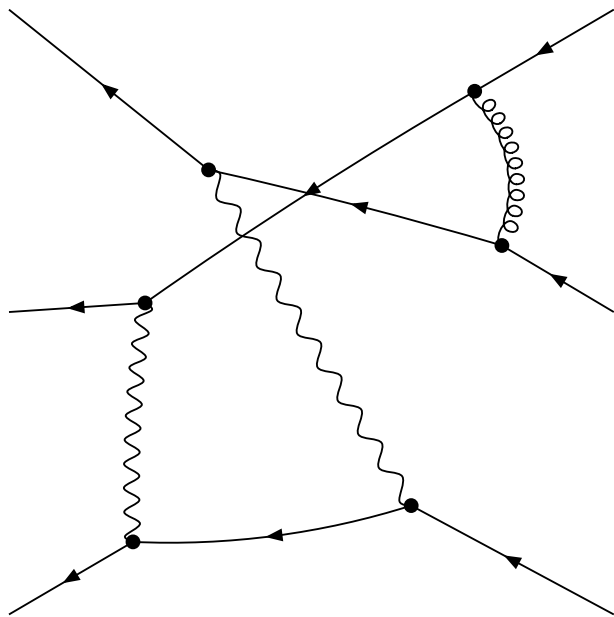
$$-1+8+14-17$$



$$-1-11-13+17$$



$$-1+8-13$$



$$-1-11+14$$

embedding 23 [1, 1, 1, 0]

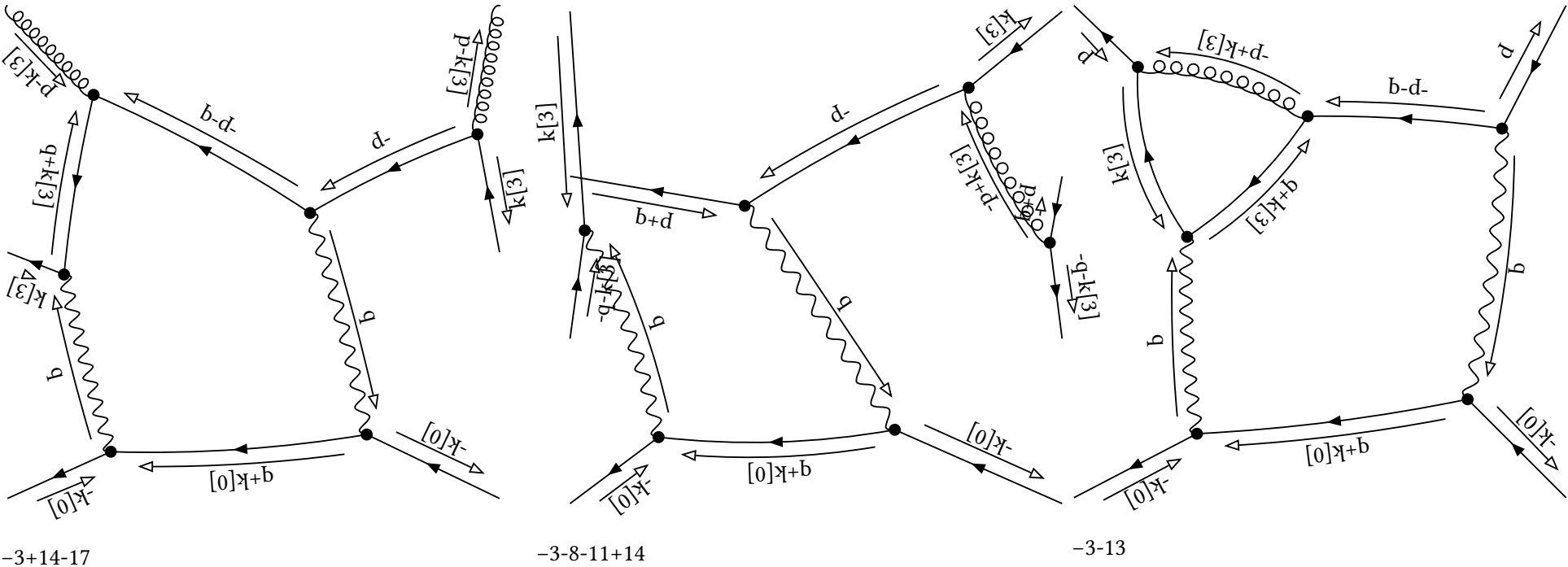
initial

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:

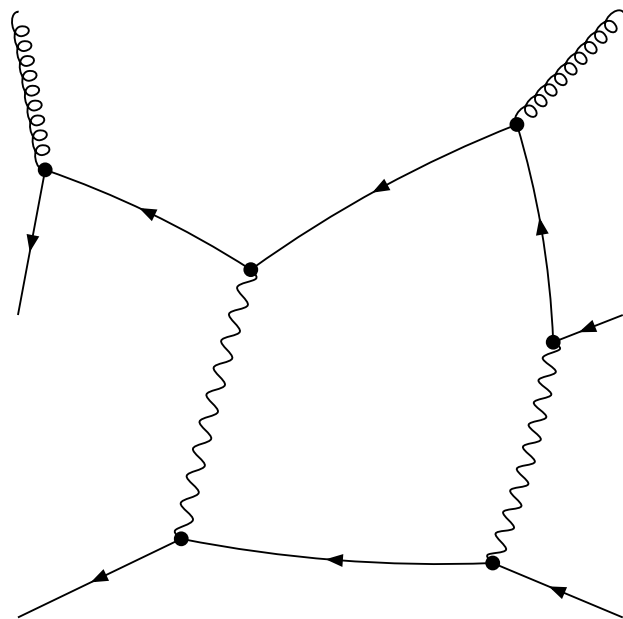
$(\text{dot}[p,p]+2 \text{dot}[p,q]+\text{dot}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-p+k[3]]^{-1} \text{dot}[p,p]^{-1}$



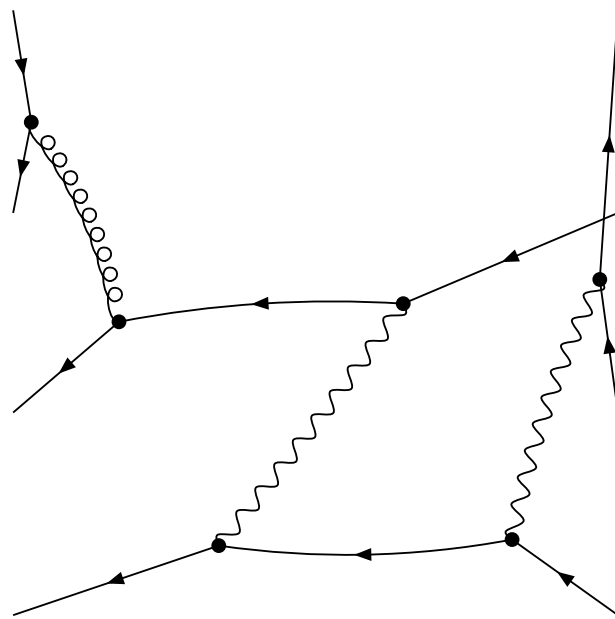
final

Denominator:

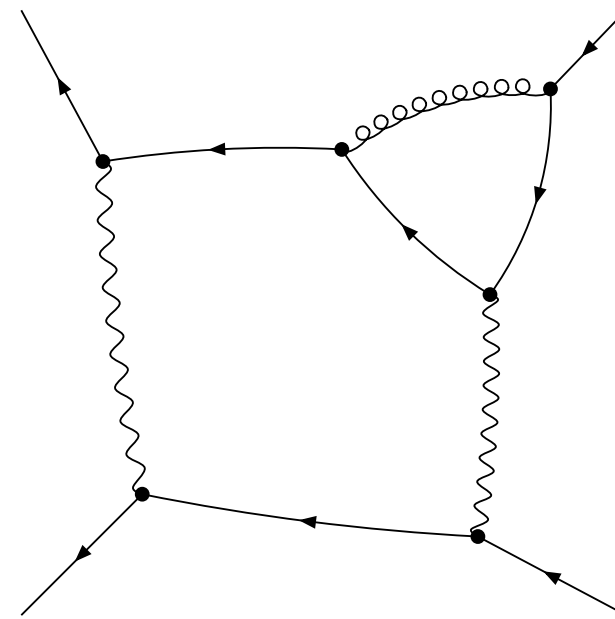
$\text{prop}[0,k[3]]^{-1} \text{prop}[0,-p]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-p+q]^{-1} \text{prop}[0,-p+q+k[3]]^{-1}$



-1+8-17



-1+8-13-14



-1-11

embedding 24 [1, 1, 1, 1]

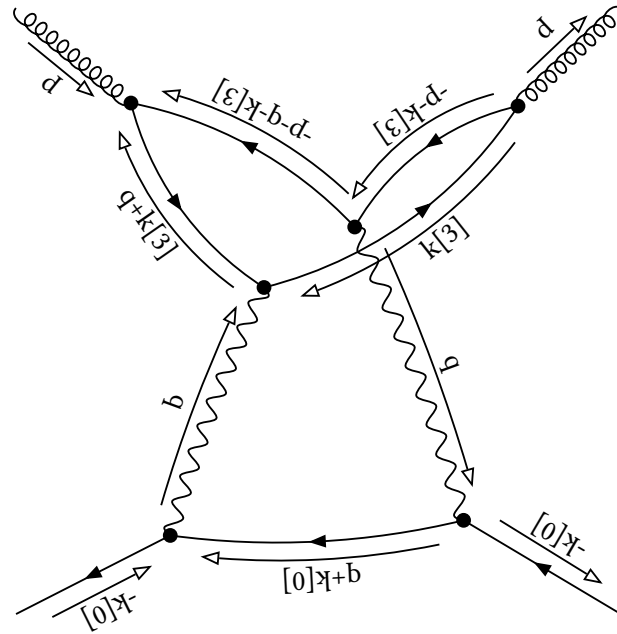
initial

Denominator:

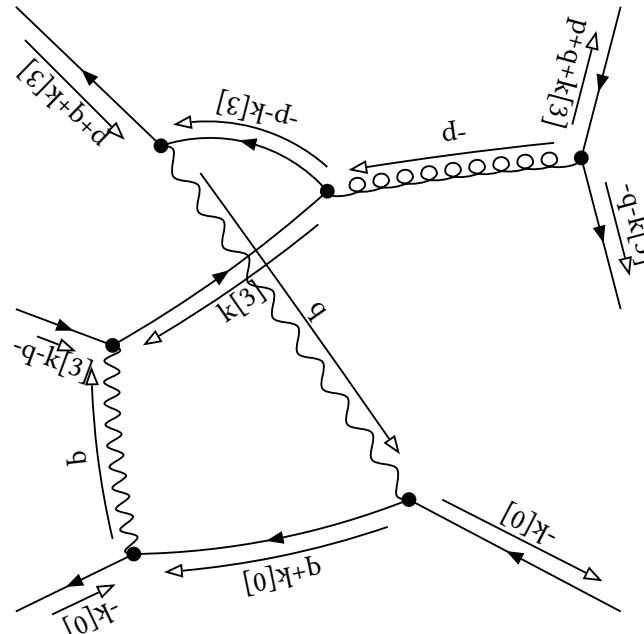
$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, -p]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-k[3]]^{-1} \text{prop}[0, -p-q-k[3]]^{-1}$$

Partial Fractioned Denominator:

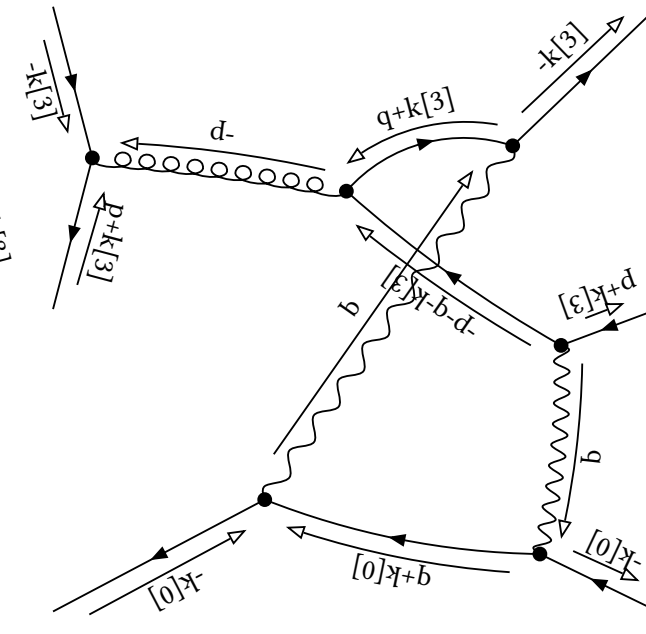
$$\begin{aligned} & \frac{1}{2} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-k[3]]^{-1} \text{dot}[p, p]^{-1} \text{dot}[p, q]^{-1} \\ & - \frac{1}{2} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-q-k[3]]^{-1} \text{dot}[p, p]^{-1} \text{dot}[p, q]^{-1}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



-3-17



-3-8-11

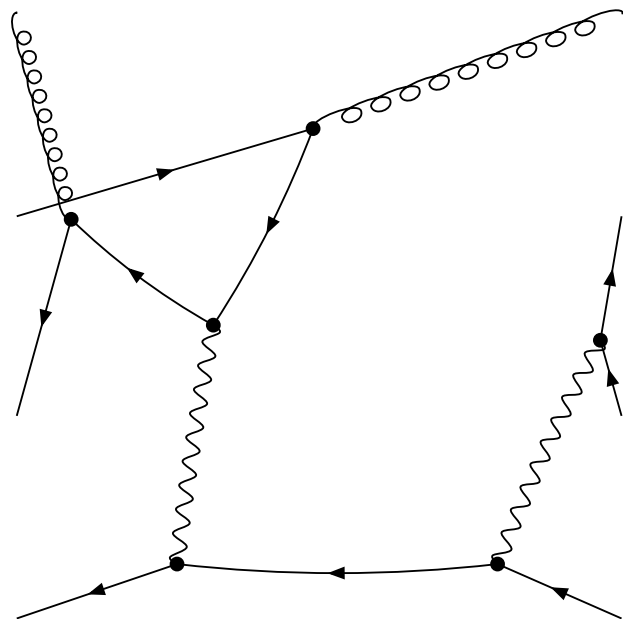


-3-13-14

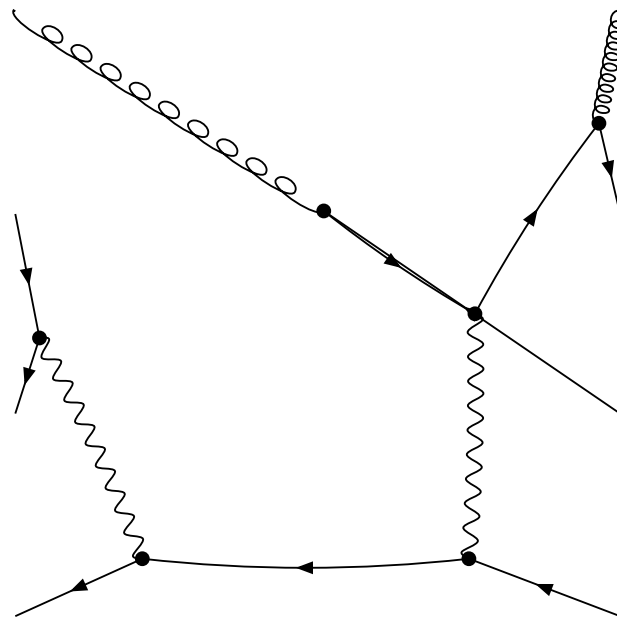
final

Denominator:

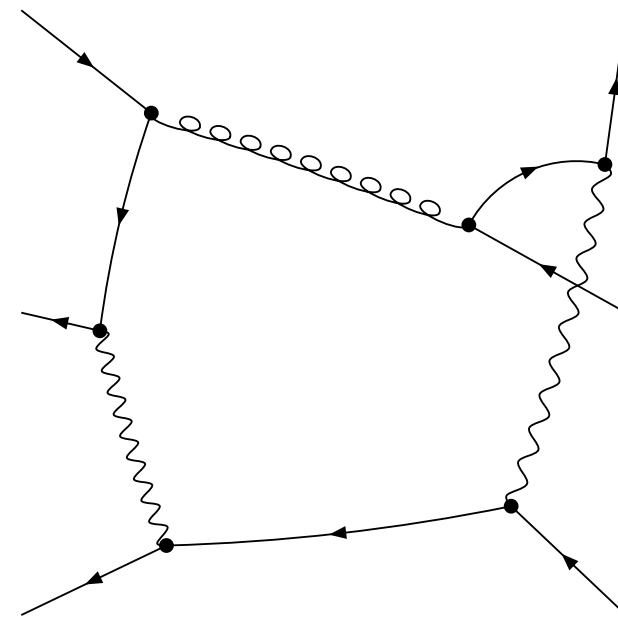
$\text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-p+q]^{-1} \text{prop}[0,-p-k[3]]^{-1} \text{prop}[0,-p+q-k[3]]^{-1}$



-1+8-14-17



-1-11+13-17



-1-11-14

embedding 25 [1, 1, 2, -1]

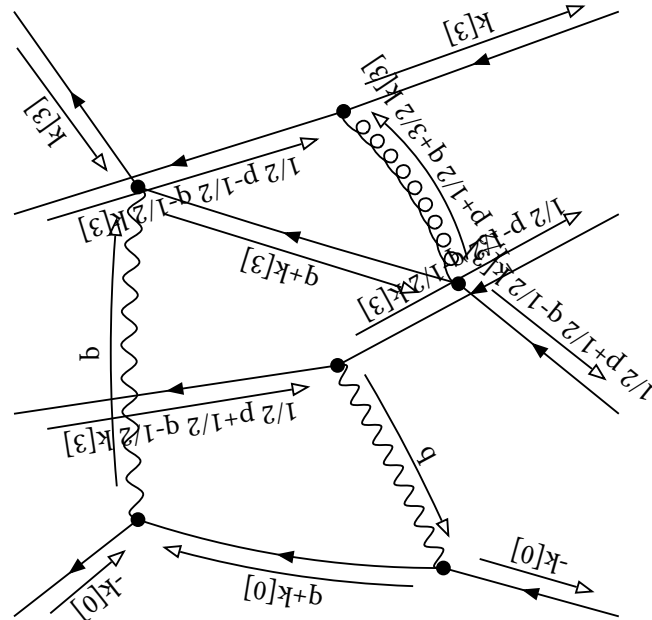
initial

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}$$

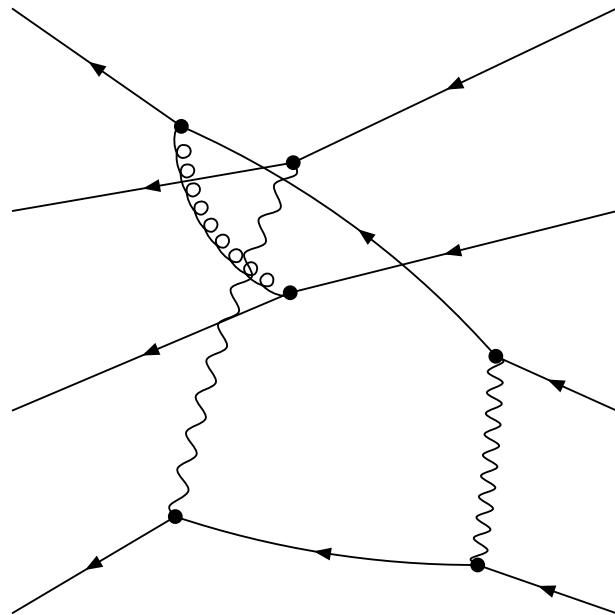


$$-3-11-13+14$$

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+8-11-13

embedding 26 [1, 2, 0, 1]

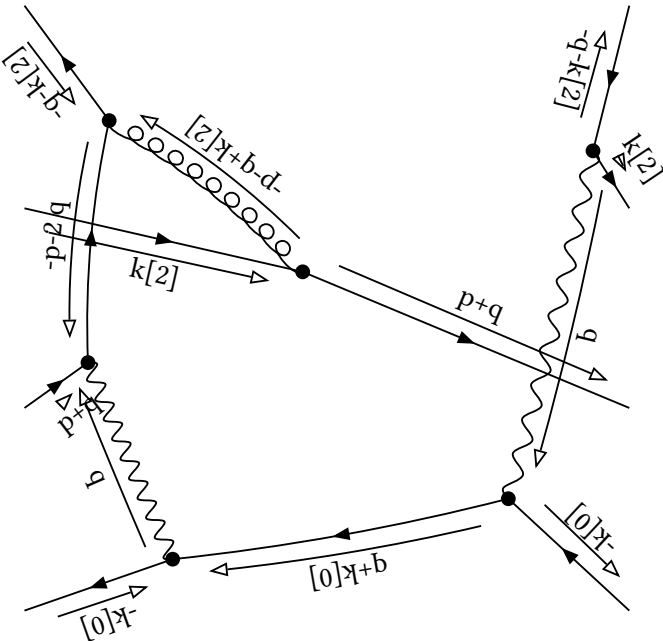
initial

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:

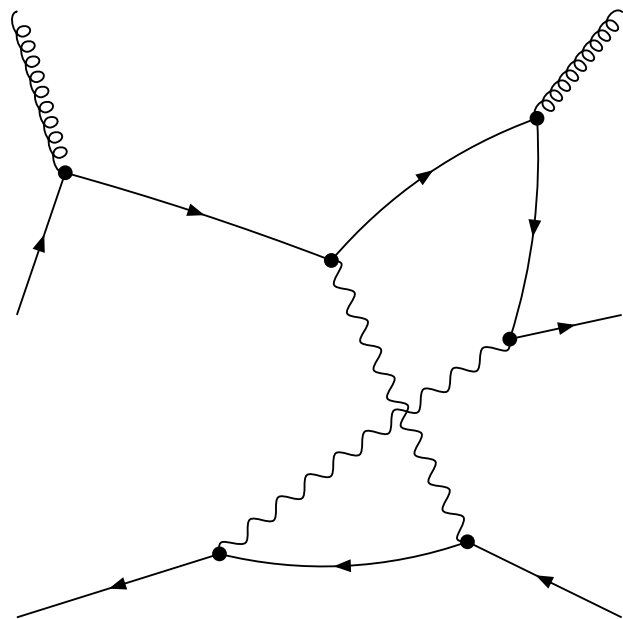
$(\text{dot}[p,p]+2\ \text{dot}[p,q]+\text{dot}[q,q])^{-1} (\text{dot}[p,p]+4\ \text{dot}[p,q]+4\ \text{dot}[q,q])^{-1} \text{prop}[0,k[2]]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,-p-q+k[2]]^{-1}$



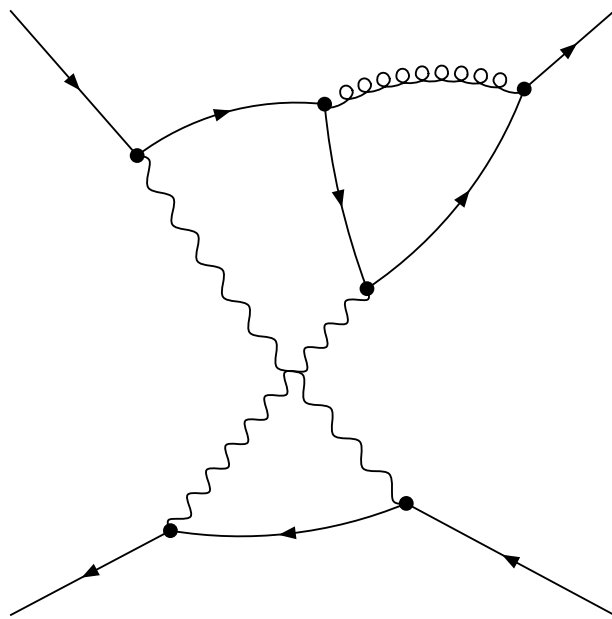
final

Denominator:

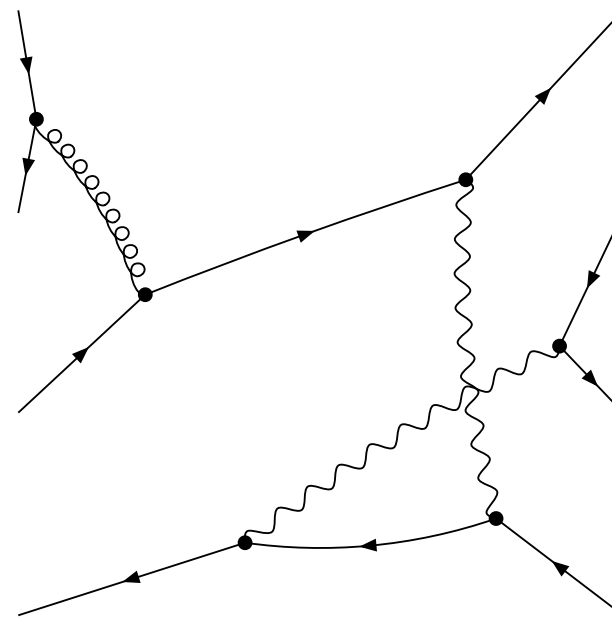
$\text{prop}[0,k[2]]^{-1} \text{prop}[0,-p]^{-1} \text{prop}[0,q+k[2]]^{-1} \text{prop}[0,-p+k[2]]^{-1} \text{prop}[0,-p-q]^{-1}$



-1+11-17



-1-8



-1+11-13-14

embedding 27 [1, 2, 1, 0]

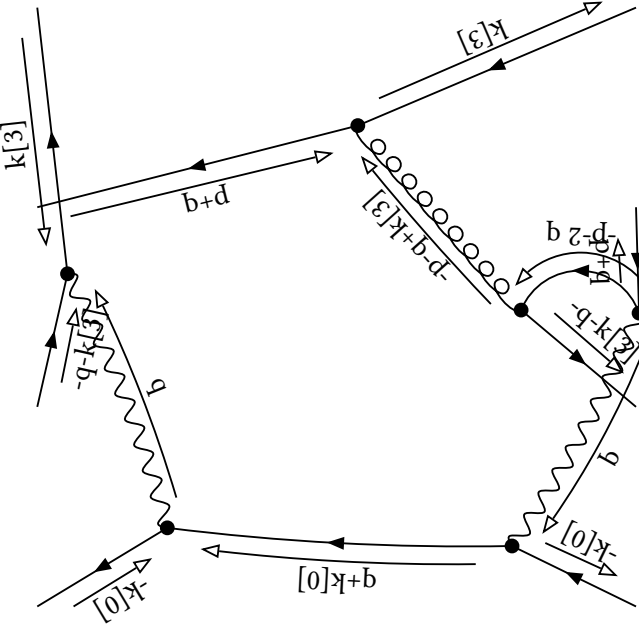
initial

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:

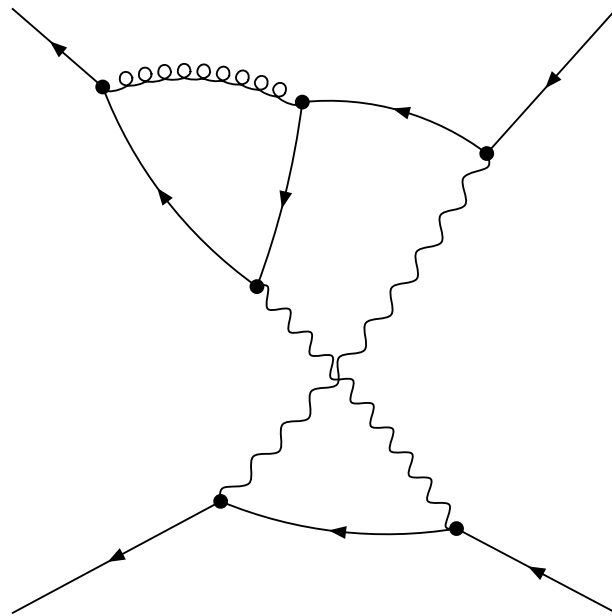
$(\text{dot}[p,p]+2\ \text{dot}[p,q]+\text{dot}[q,q])^{-1} (\text{dot}[p,p]+4\ \text{dot}[p,q]+4\ \text{dot}[q,q])^{-1} \text{prop}[0,k[3]]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-p-q+k[3]]^{-1}$



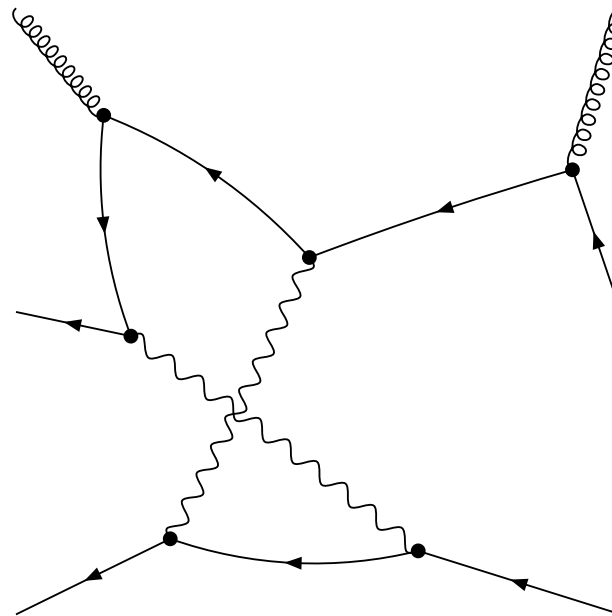
final

Denominator:

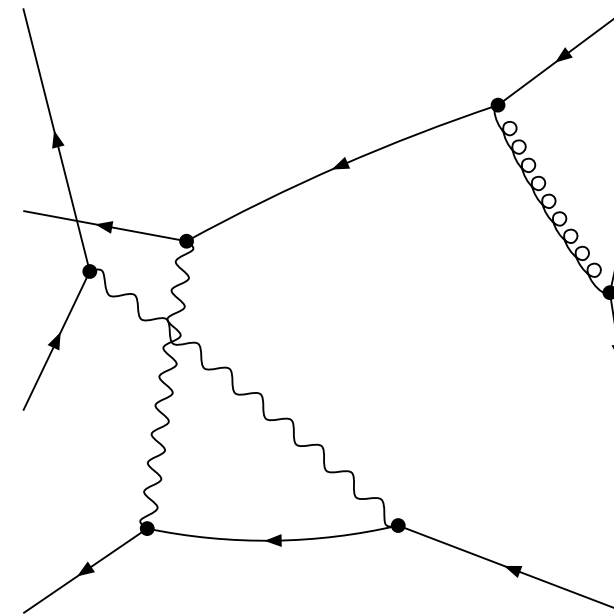
$\text{prop}[0,k[3]]^{-1} \text{prop}[0,-p]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-p+k[3]]^{-1} \text{prop}[0,-p-q]^{-1}$



-1-13



-1+14-17



-1-8-11+14

embedding 28 [1, 2, 1, 1]

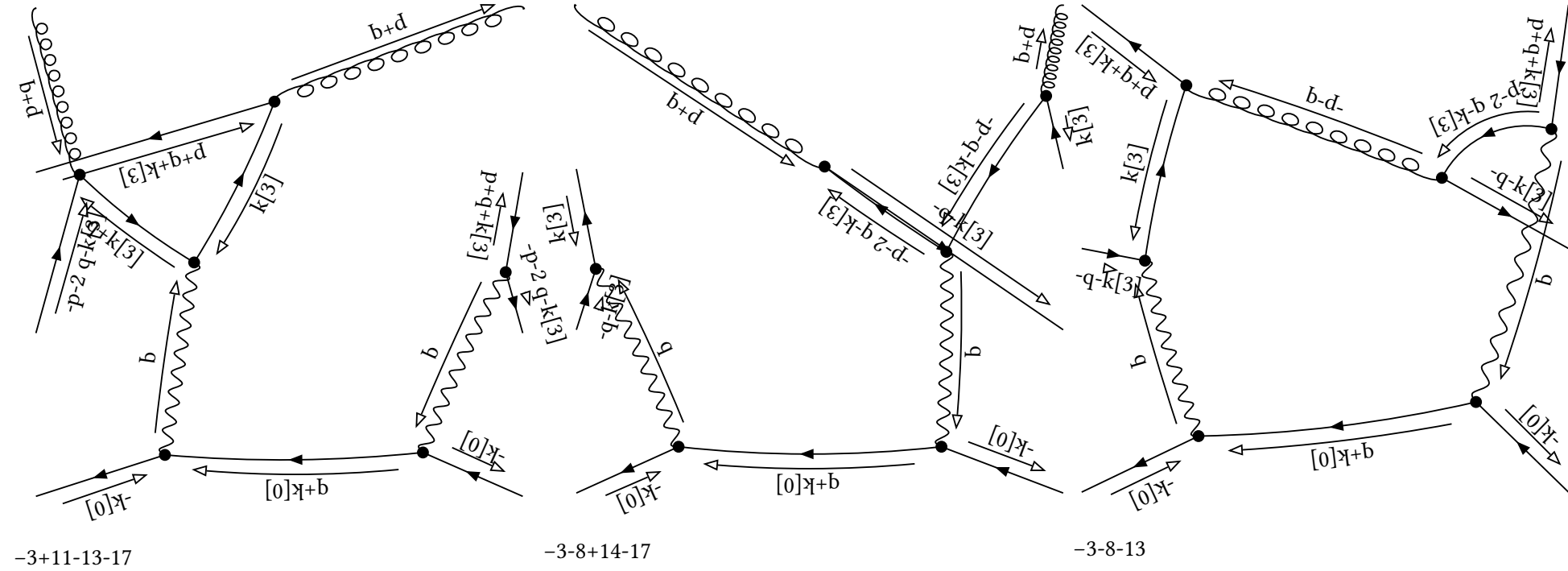
initial

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:

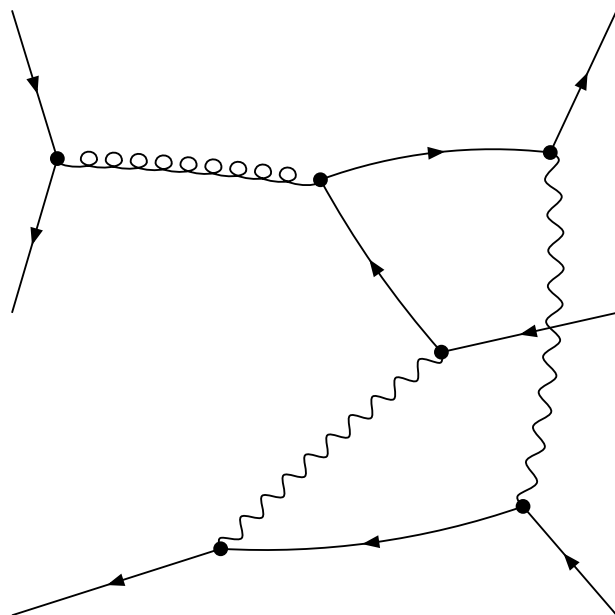
$$\begin{aligned} & (2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} (\text{dot}[p, p] + 2 \text{dot}[p, q] + \text{dot}[q, q])^{-1} \text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-q-k[3]]^{-1} \\ & - (2 \text{dot}[p, q] + 2 \text{dot}[q, q])^{-1} (\text{dot}[p, p] + 2 \text{dot}[p,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



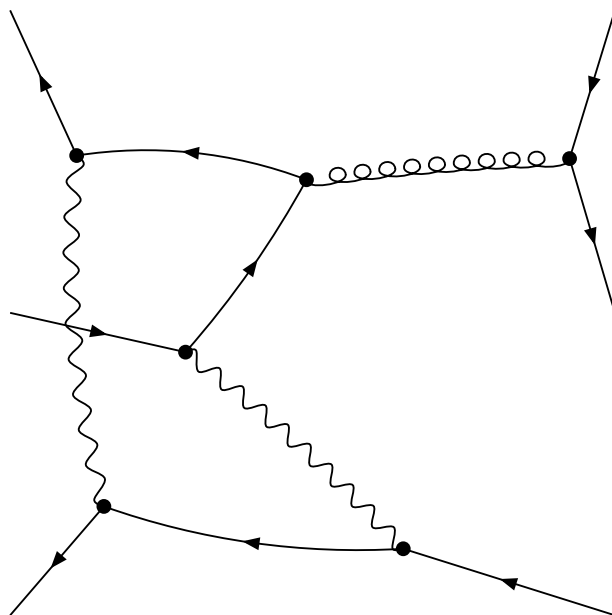
final

Denominator:

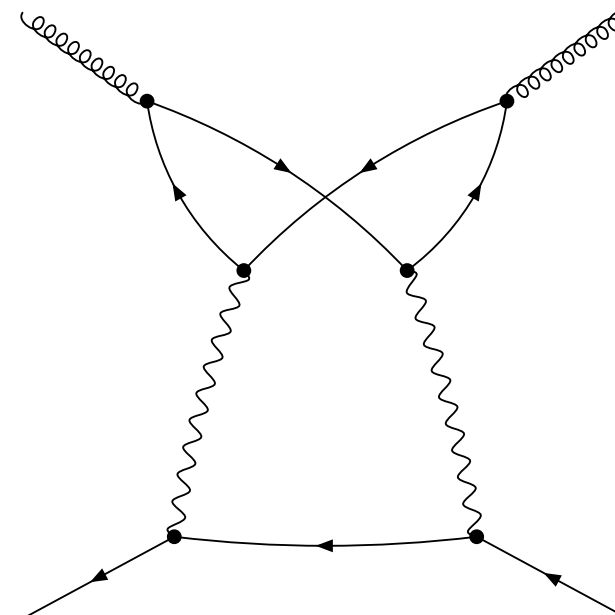
$\text{prop}[0,k[3]]^{-1} \text{prop}[0,-p]^{-1} \text{prop}[0,q+k[3]]^{-1} \text{prop}[0,-p-k[3]]^{-1} \text{prop}[0,-p-q-k[3]]^{-1}$



-1-13-14



-1-8-11



-1-17

embedding 29 [1, 2, 1, 2]

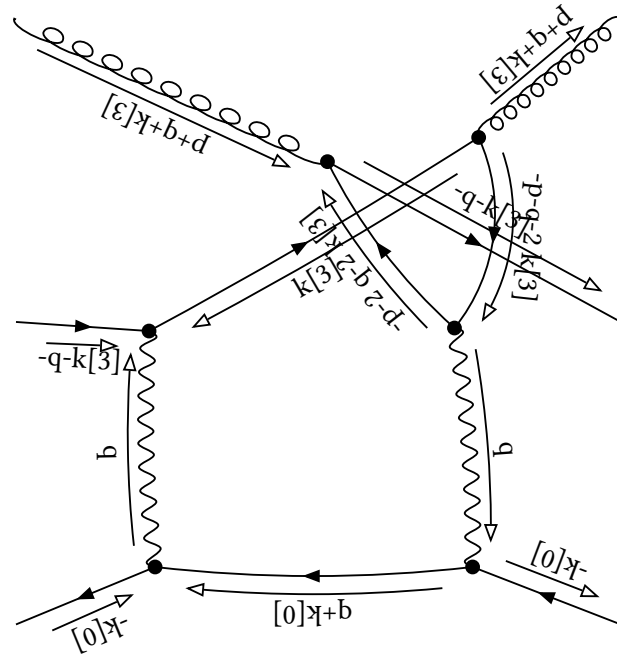
initial

Denominator:

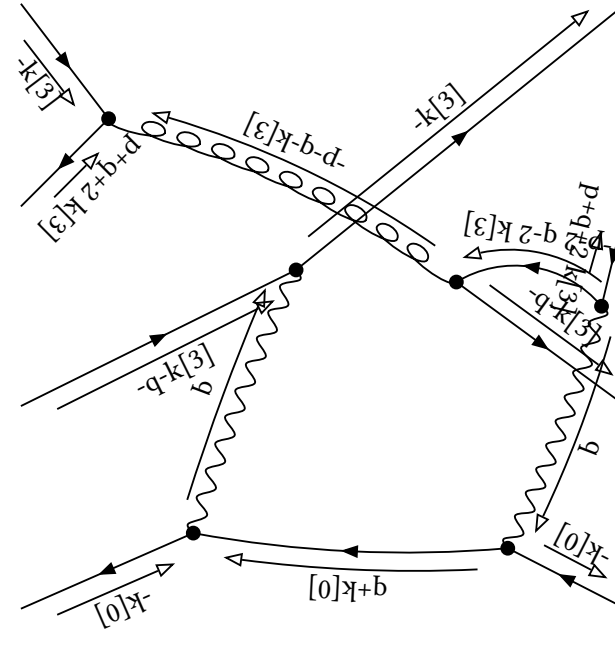
$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -p-q-k[3]]^{-1} \text{prop}[0, -p-q-2 k[3]]^{-1} \text{prop}[0, -p-2 q-2 k[3]]^{-1}$$

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}$$



-3-8-17

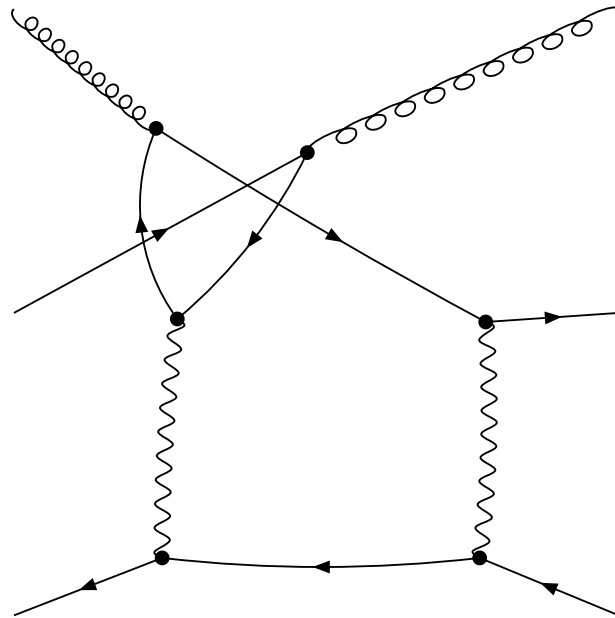


-3-8-13-14

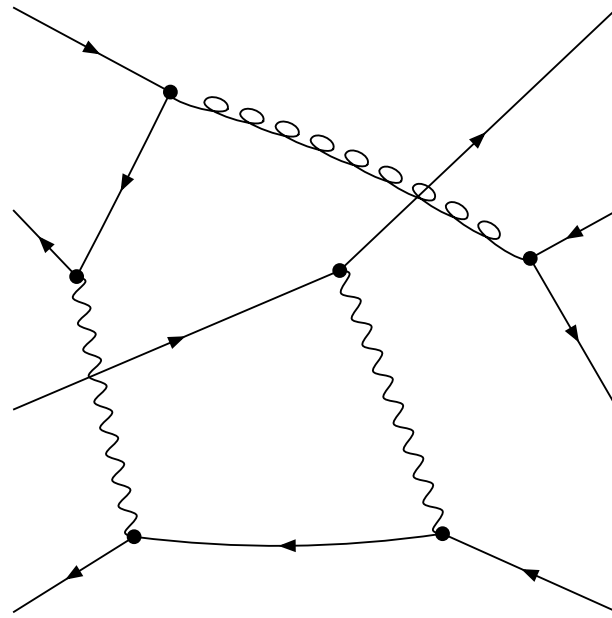
final

Denominator:

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



-1-14-17



-1-8-11-14

embedding 30 [1, 2, 2, 1]

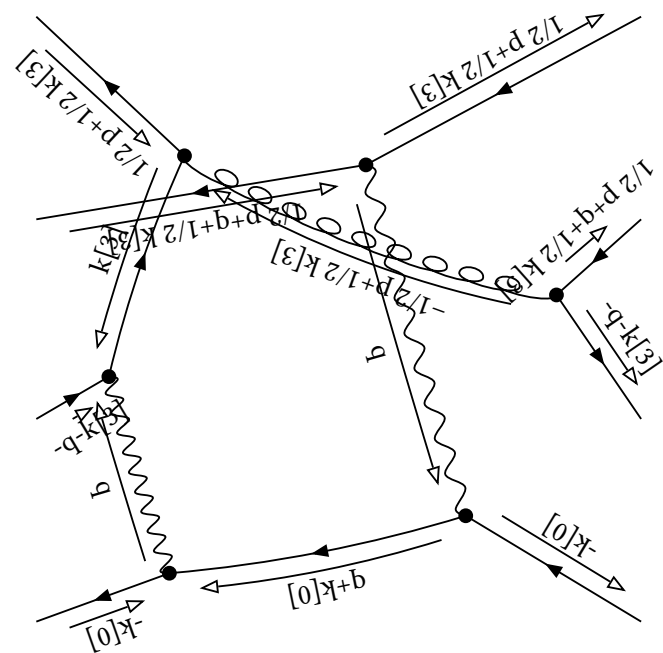
initial

Denominator:

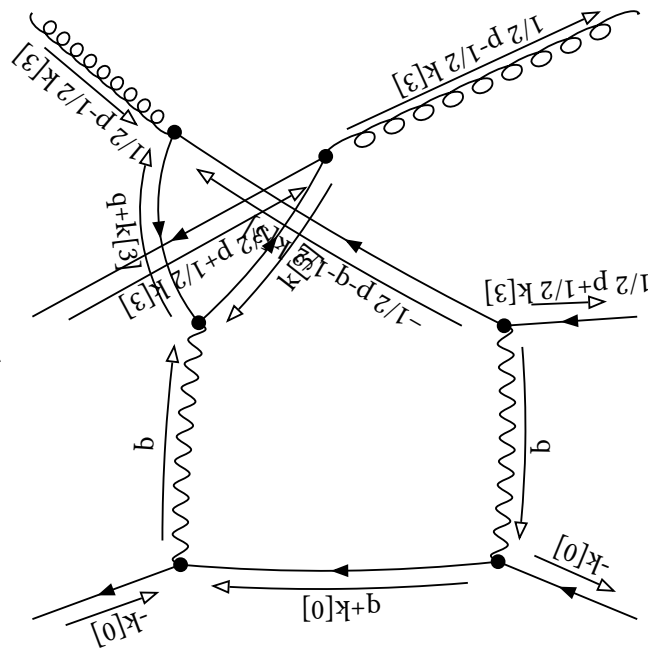
$$\text{prop}[0, k[3]]^{-1} \text{prop}[0, q+k[3]]^{-1} \text{prop}[0, -1/2 p+1/2 k[3]]^{-1} \text{prop}[0, -1/2 p-1/2 k[3]]^{-1} \text{prop}[0, -1/2 p-q-1/2 k[3]]^{-1}$$

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} \\ & + 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}$$



-3-8-11-13

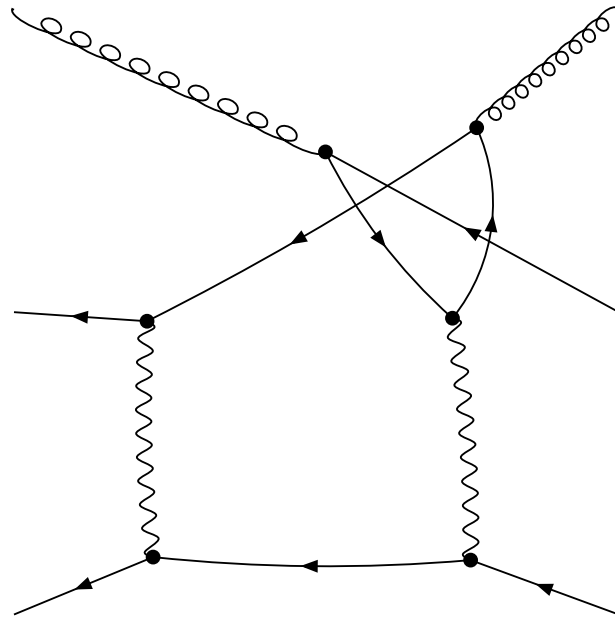


-3-13-17

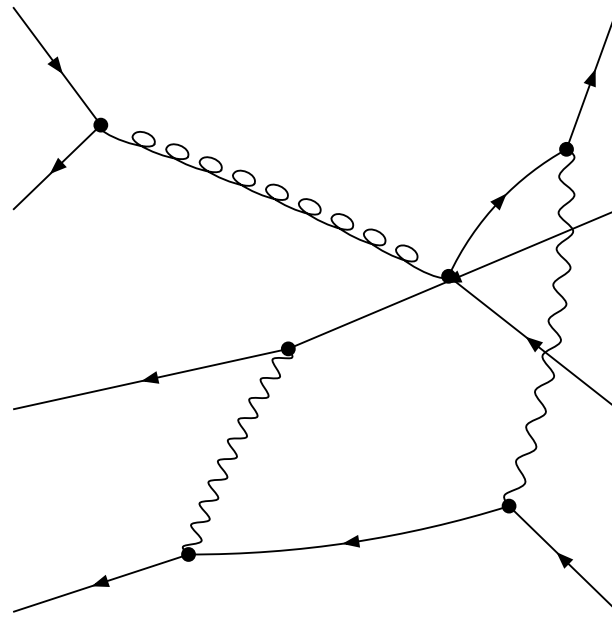
final

Denominator:

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



-1-11-17



-1-11-13-14

