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

initial

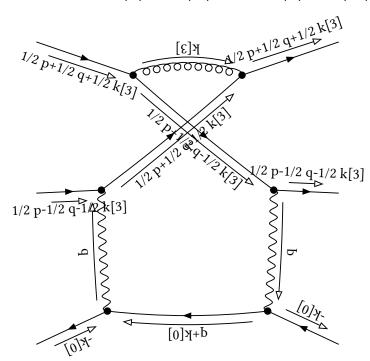
Denominator:

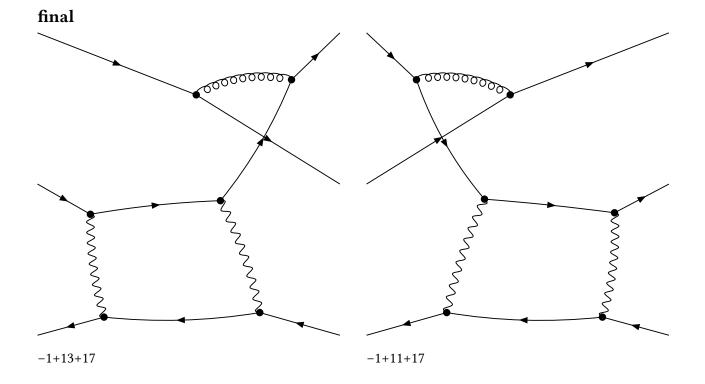
prop[0,k[3]]^-1 prop[0,1/2 p+1/2 q+1/2 k[3]]^-1 prop[0,1/2 p+1/2 q-1/2 k[3]]^-2 prop[0,1/2 p-1/2 q-1/2 k[3]]^-1

Partial Fractioned Denominator:

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

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





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

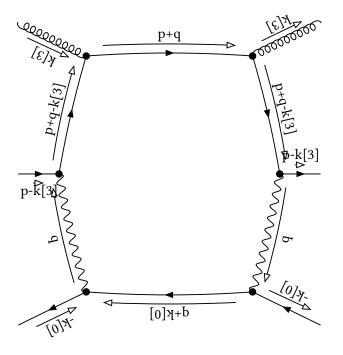
initial

Denominator:

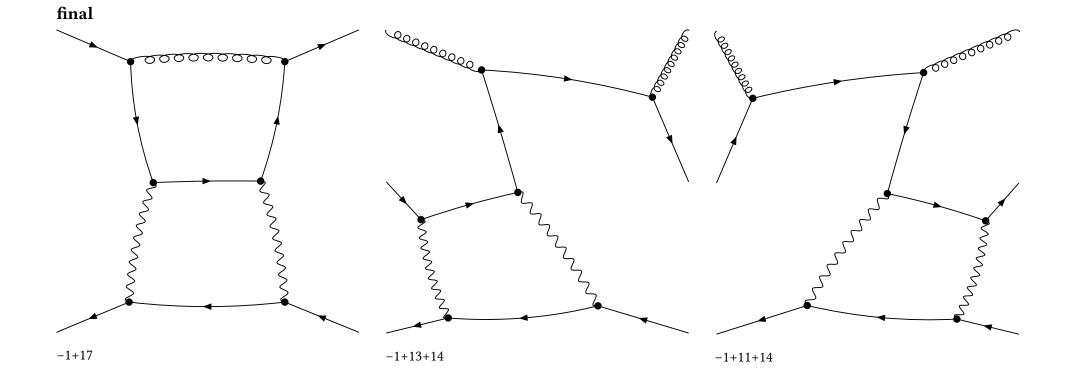
prop[0,k[3]]^-1 prop[0,p+q]^-1 prop[0,p-k[3]]^-1 prop[0,p+q-k[3]]^-2

Partial Fractioned Denominator:

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



-3+9+14



embedding 3 [1, 0, -1, 0]

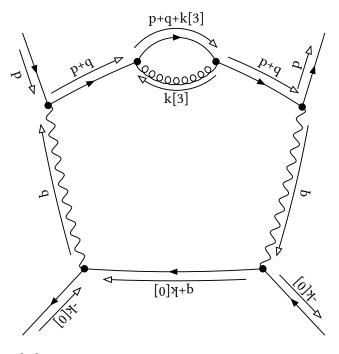
initial

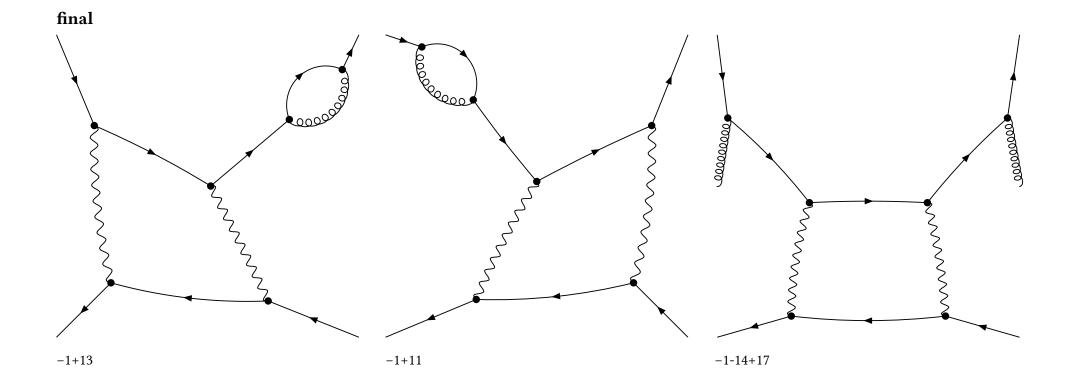
Denominator:

prop[0,p]^-1 prop[0,k[3]]^-1 prop[0,p+q]^-2 prop[0,p+q+k[3]]^-1

Partial Fractioned Denominator:

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





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

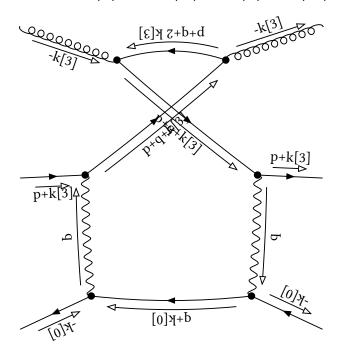
initial

Denominator:

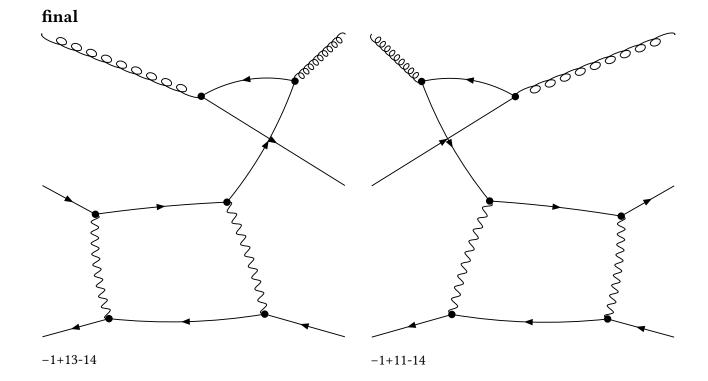
 $prop[0,k[3]]^{-1} prop[0,p+k[3]]^{-1} prop[0,p+q+k[3]]^{-2} prop[0,p+q+2 k[3]]^{-1}$

Partial Fractioned Denominator:

```
-2 (-dot[p,p]-2 dot[p,q]-dot[q,q])^-2 prop[0,k[3]]^-1 prop[0,p+k[3]]^-1 prop[0,p+q+k[3]]^-1 
+4 (-dot[p,p]-2 dot[p,q]-dot[q,q])^-2 prop[0,k[3]]^-1 prop[0,p+k[3]]^-1 prop[0,p+q+2 k[3]]^-1 
+4 (-dot[p,p]-2 dot[p,q]-dot[q,q])^-2 prop[0,p+k[3]]^-1 prop[0,p+q+k[3]]^-1 prop[0,p+q+2 k[3]]^-1 
+(-dot[p,p]-2 dot[p,q]-dot[q,q])^-1 prop[0,k[3]]^-1 prop[0,p+k[3]]^-1 prop[0,p+q+k[3]]^-2 
-2 (-dot[p,p]-2 dot[p,q]-dot[q,q])^-1 prop[0,p+k[3]]^-1 prop[0,p+q+k[3]]^-2 prop[0,p+q+2 k[3]]^-1
```



-3+9-14



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

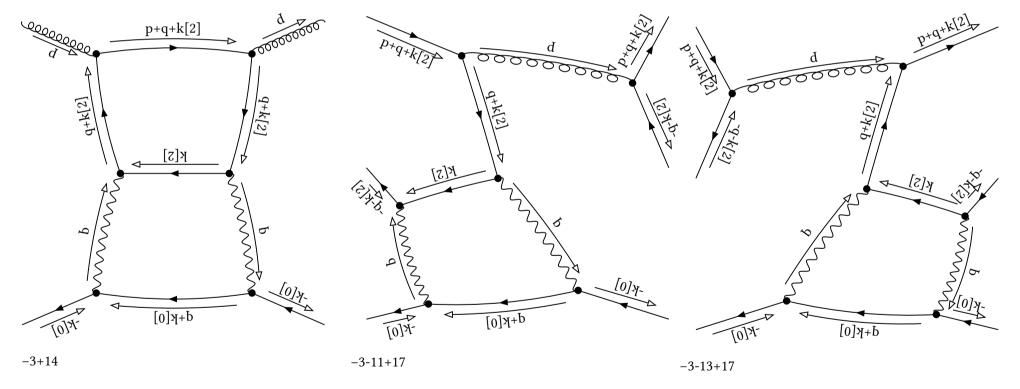
initial

Denominator:

prop[0,p]^-1 prop[0,k[2]]^-1 prop[0,q+k[2]]^-2 prop[0,p+q+k[2]]^-1

Partial Fractioned Denominator:

prop[0,k[2]]^-1 prop[0,q+k[2]]^-2 prop[0,p+q+k[2]]^-1 dot[p,p]^-1



final **♥** 000000000

-1-9+17

embedding 6 [1, 1, 0, 1]

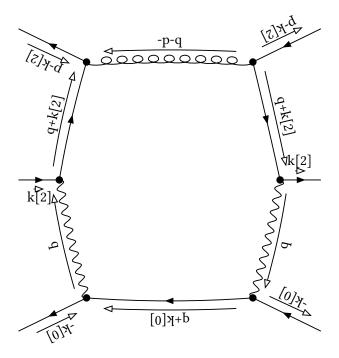
initial

Denominator:

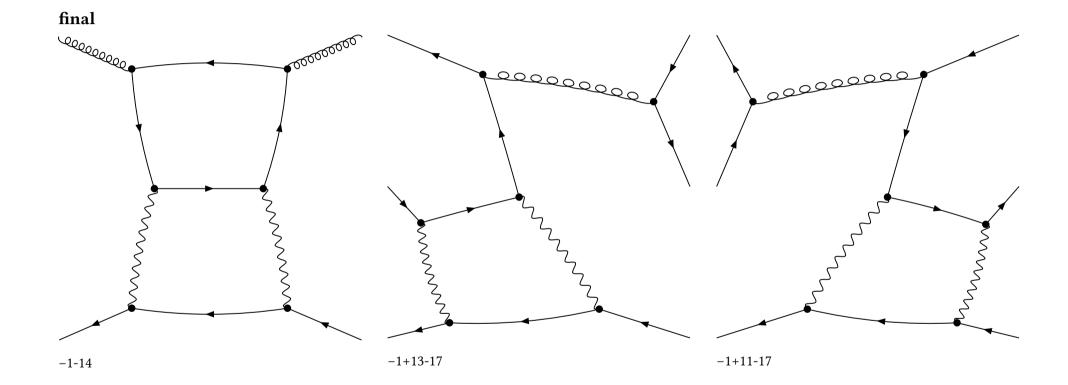
prop[0,k[2]]^-1 prop[0,q+k[2]]^-2 prop[0,-p+k[2]]^-1 prop[0,-p-q]^-1

Partial Fractioned Denominator:

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



-3+9-17



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

initial

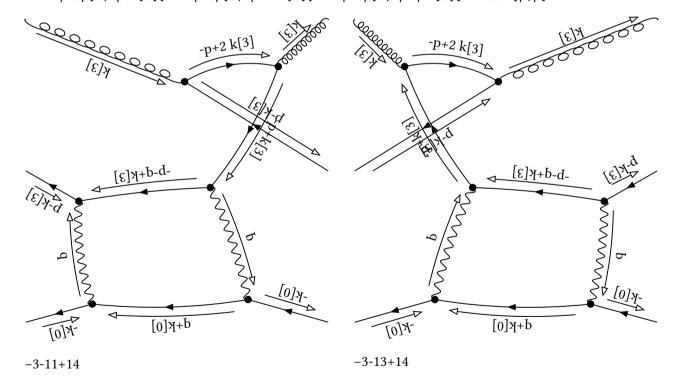
Denominator:

prop[0,k[3]]^-1 prop[0,-p+k[3]]^-2 prop[0,-p+2 k[3]]^-1 prop[0,-p-q+k[3]]^-1

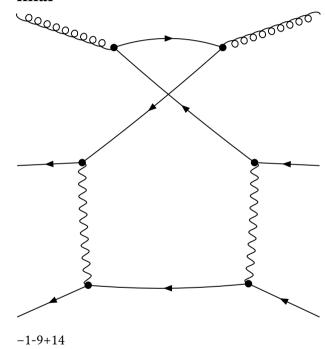
Partial Fractioned Denominator:

```
-prop[0,k[3]]^-1 prop[0,-p+k[3]]^-2 prop[0,-p-q+k[3]]^-1 dot[p,p]^-1
-2 prop[0,k[3]]^-1 prop[0,-p+k[3]]^-1 prop[0,-p-q+k[3]]^-2
```

- +4 prop[0,k[3]]^-1 prop[0,-p+2 k[3]]^-1 prop[0,-p-q+k[3]]^-1 dot[p,p]^-2
- +2 prop[0,-p+k[3]]^-2 prop[0,-p+2 k[3]]^-1 prop[0,-p-q+k[3]]^-1 dot[p,p]^-1
- +4 prop[0,-p+k[3]]^-1 prop[0,-p+2 k[3]]^-1 prop[0,-p-q+k[3]]^-1 dot[p,p]^-2



final



embedding 8 [1, 1, 1, 0]

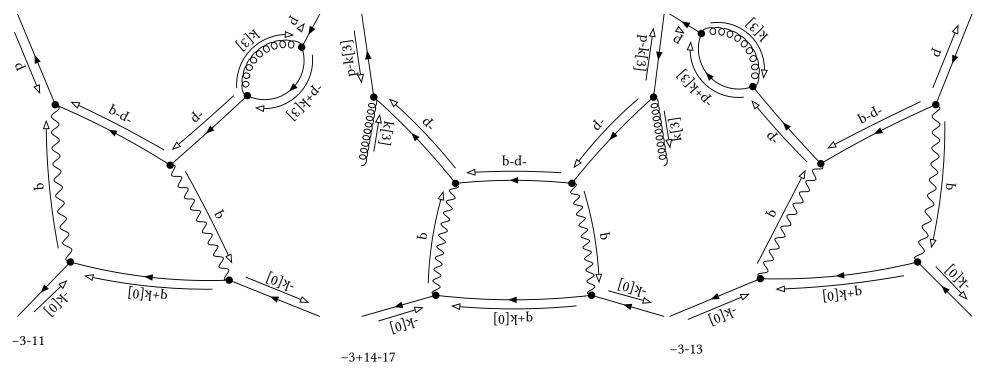
initial

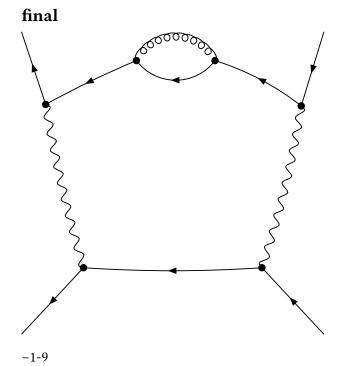
Denominator:

prop[0,k[3]]^-1 prop[0,-p]^-2 prop[0,-p+k[3]]^-1 prop[0,-p-q]^-1

Partial Fractioned Denominator:

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





embedding 9 [1, 1, 1, 1]

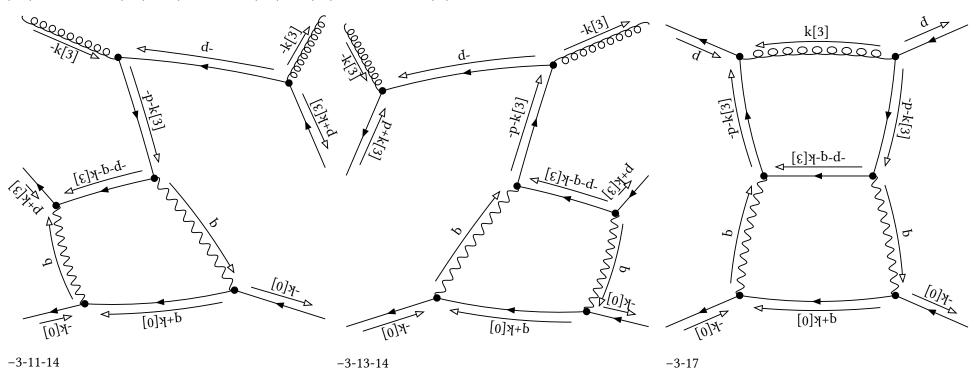
initial

Denominator:

prop[0,k[3]]^-1 prop[0,-p]^-1 prop[0,-p-k[3]]^-2 prop[0,-p-q-k[3]]^-1

Partial Fractioned Denominator:

prop[0,k[3]]^-1 prop[0,-p-k[3]]^-2 prop[0,-p-q-k[3]]^-1 dot[p,p]^-1



final

-1-9-14

embedding 10 [1, 2, 2, 1]

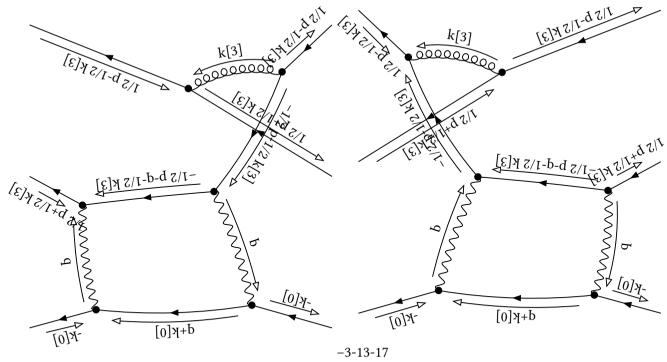
initial

Denominator:

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

Partial Fractioned Denominator:

4 prop[0,k[3]]^-1 prop[0,-1/2 p+1/2 k[3]]^-1 prop[0,-1/2 p-q-1/2 k[3]]^-1 dot[p,p]^-2 +2 prop[0,k[3]]^-1 prop[0,-1/2 p-1/2 k[3]]^-2 prop[0,-1/2 p-q-1/2 k[3]]^-1 dot[p,p]^-1 +4 prop[0,k[3]]^-1 prop[0,-1/2 p-1/2 k[3]]^-1 prop[0,-1/2 p-1/2 k[3]]^-1 dot[p,p]^-2 -prop[0,-1/2 p+1/2 k[3]]^-1 prop[0,-1/2 p-1/2 k[3]]^-2 prop[0,-1/2 p-q-1/2 k[3]]^-1 dot[p,p]^-1 -2 prop[0,-1/2 p+1/2 k[3]]^-1 prop[0,-1/2 p-1/2 k[3]]^-1 prop[0,-1/2 p-1/2 k[3]]^-2



final 990000000 -1-9-17