embedding 1 [1, −1, −1, −2] with multiplicity 2

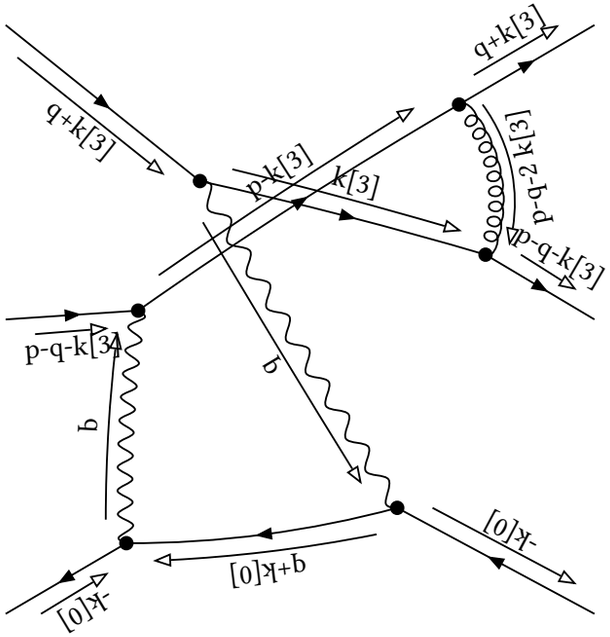
initial

Denominator:

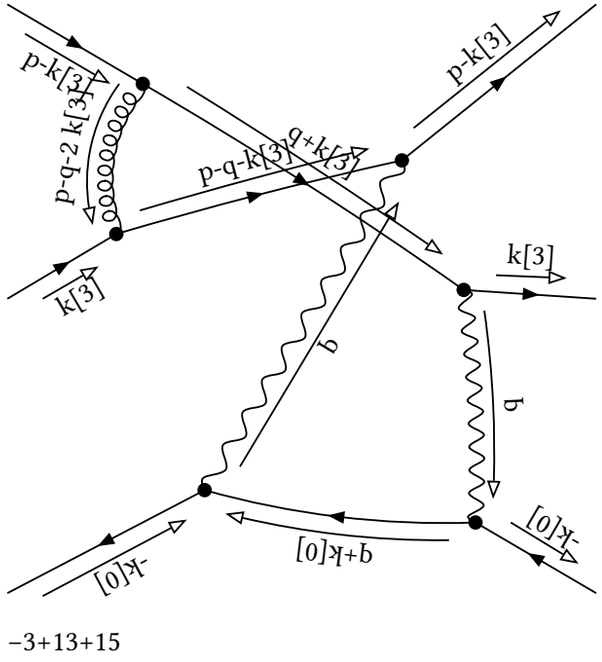
```
prop[0,k[3]]^-1 prop[0,q+k[3]]^-1 prop[0,p-k[3]]^-1 prop[0,p-q-k[3]]^-1 prop[0,p-q-2 k[3]]^-1
```

Partial Fractioned Denominator:

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



−3+11+17

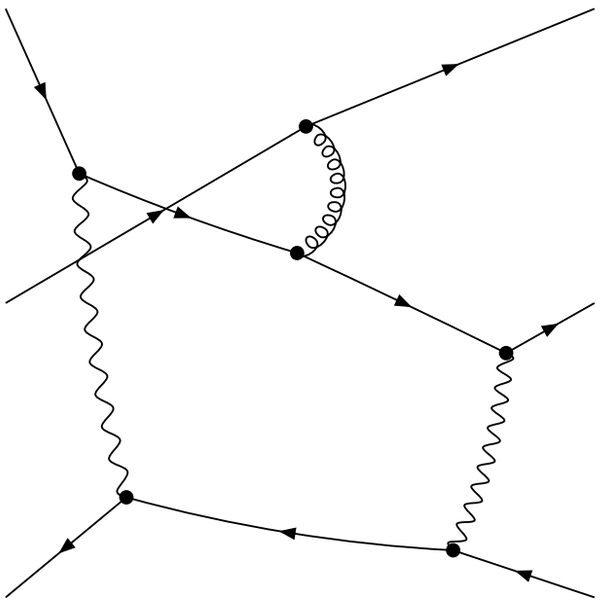


−3+13+15

final

Denominator:

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



−1+15+17

embedding 2 [1, 0, −2, −1] with multiplicity 2

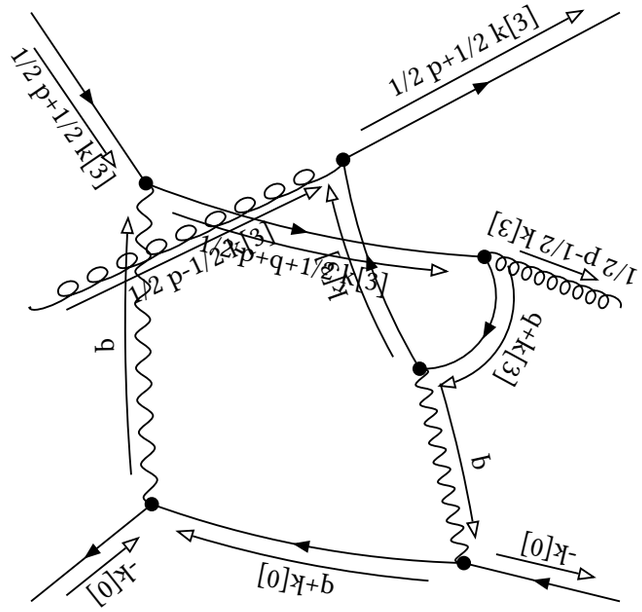
initial

Denominator:

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

Partial Fractioned Denominator:

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

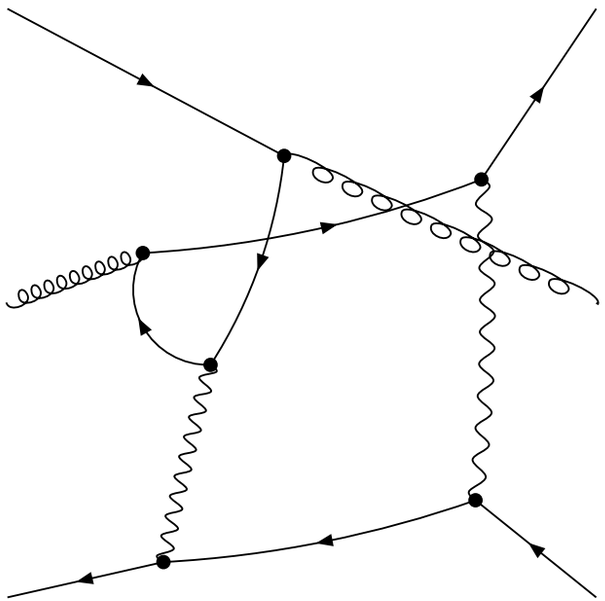


−3+9+11

final

Denominator:

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



−1+9+15

embedding 3 [1, 0, −1, −1] with multiplicity 2

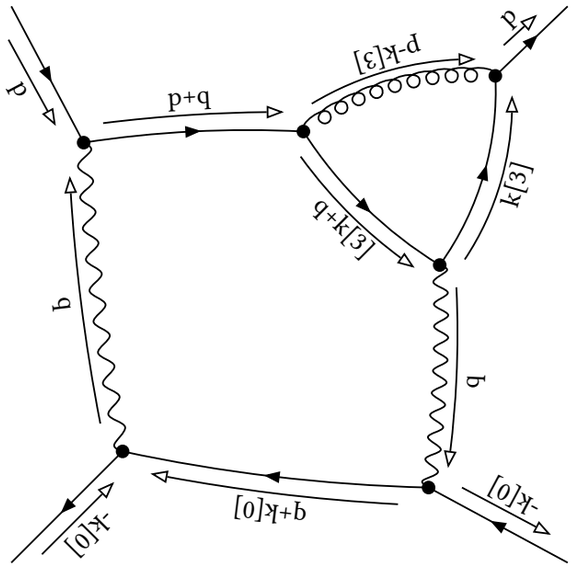
initial

Denominator:

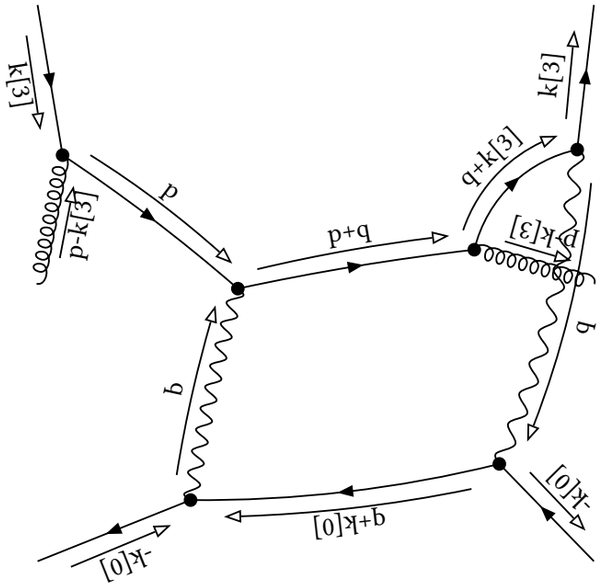
```
prop[0,p]^-1 prop[0,k[3]]^-1 prop[0,p+q]^-1 prop[0,q+k[3]]^-1 prop[0,p-k[3]]^-1
```

Partial Fractioned Denominator:

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



−3+11

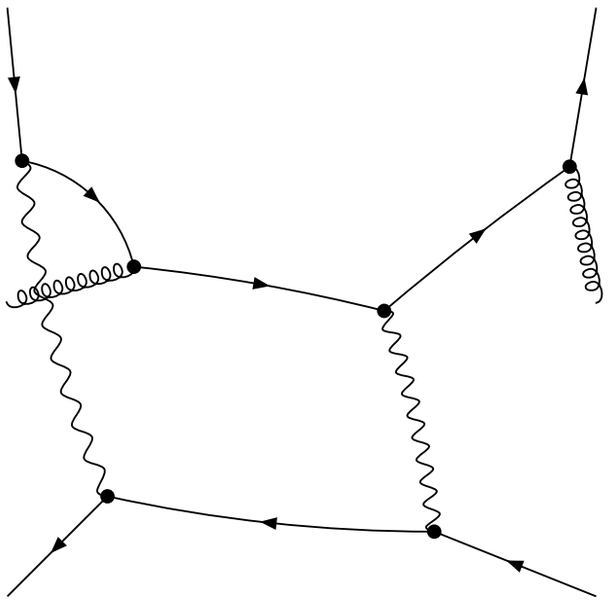


−3+9+13

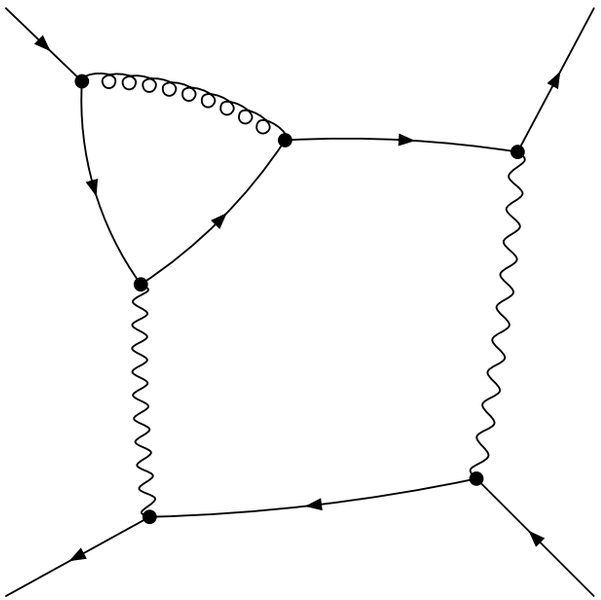
final

Denominator:

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



−1+9+17



−1+15

embedding 4 [1, 0, −1, 0] with multiplicity 2

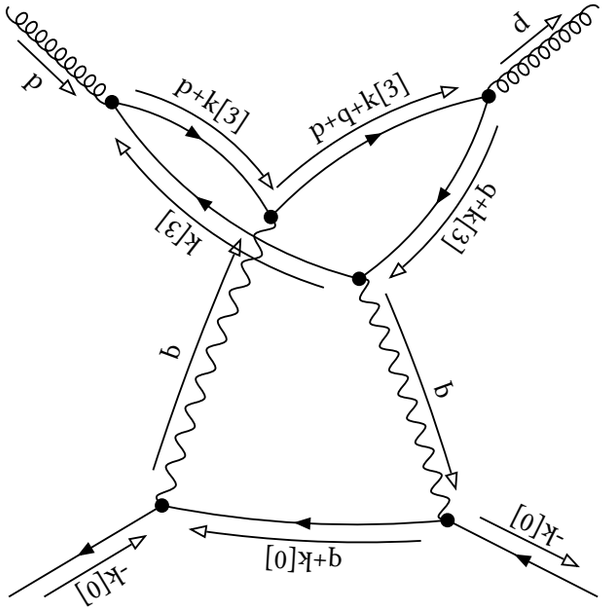
initial

Denominator:

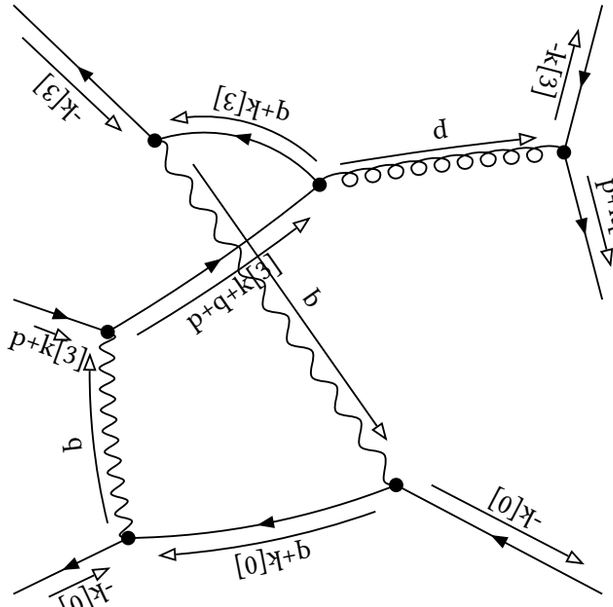
```
prop[0,p]^-1 prop[0,k[3]]^-1 prop[0,p+k[3]]^-1 prop[0,q+k[3]]^-1 prop[0,p+q+k[3]]^-1
```

Partial Fractioned Denominator:

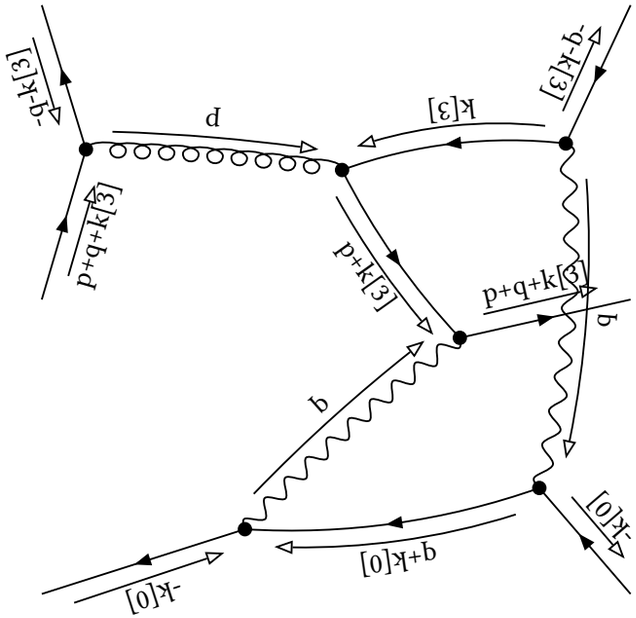
```
1/2 prop[0,k[3]]^-1 prop[0,p+k[3]]^-1 prop[0,q+k[3]]^-1 dot[p,p]^-1 dot[p,q]^-1
  -1/2 prop[0,k[3]]^-1 prop[0,p+k[3]]^-1 prop[0,p+q+k[3]]^-1 dot[p,p]^-1 dot[p,q]^-1
  -1/2 prop[0,k[3]]^-1 prop[0,q+k[3]]^-1 prop[0,p+q+k[3]]^-1 dot[p,p]^-1 dot[p,q]^-1
  +1/2 prop[0,p+k[3]]^-1 prop[0,q+k[3]]^-1 prop[0,p+q+k[3]]^-1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



−3+9



−3+11-13

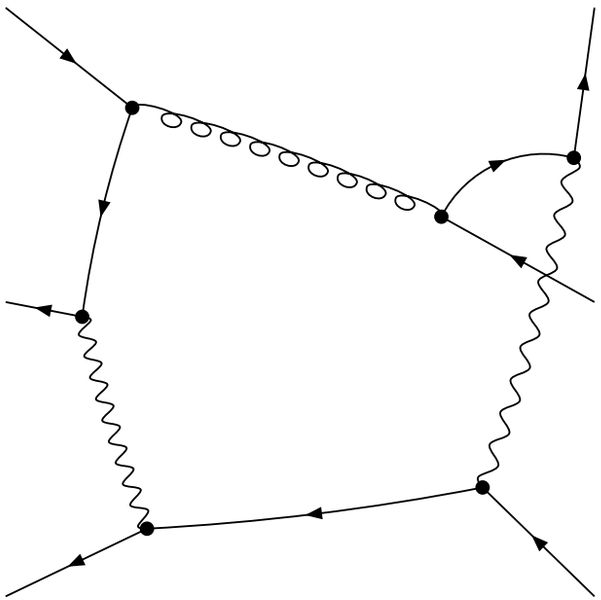


−3+15-17

final

Denominator:

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



−1-13+15

embedding 5 [1, 0, 1, 0] with multiplicity 2

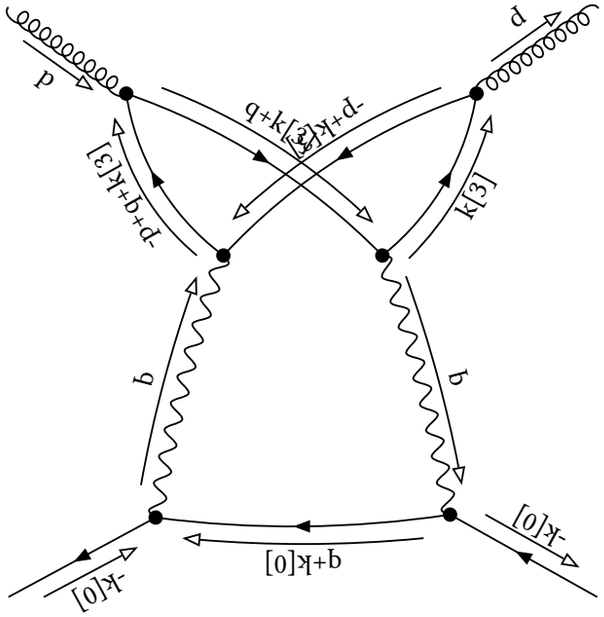
initial

Denominator:

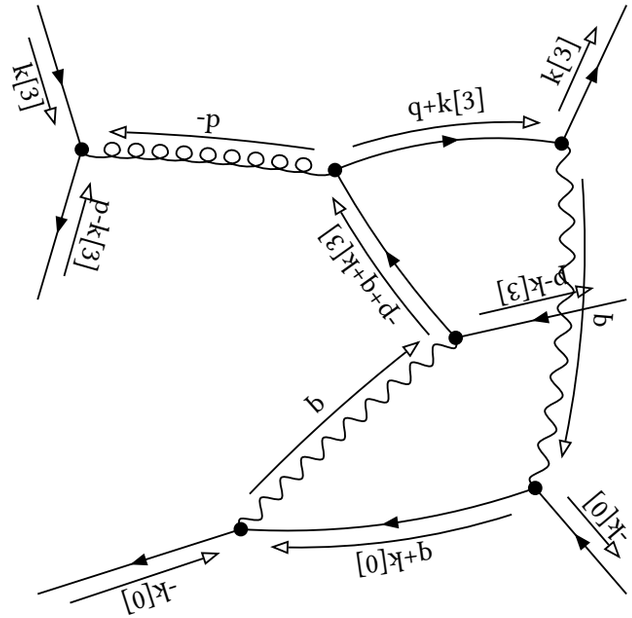
```
prop[0,k[3]]^-1 prop[0,-p]^-1 prop[0,q+k[3]]^-1 prop[0,-p+k[3]]^-1 prop[0,-p+q+k[3]]^-1
```

Partial Fractioned Denominator:

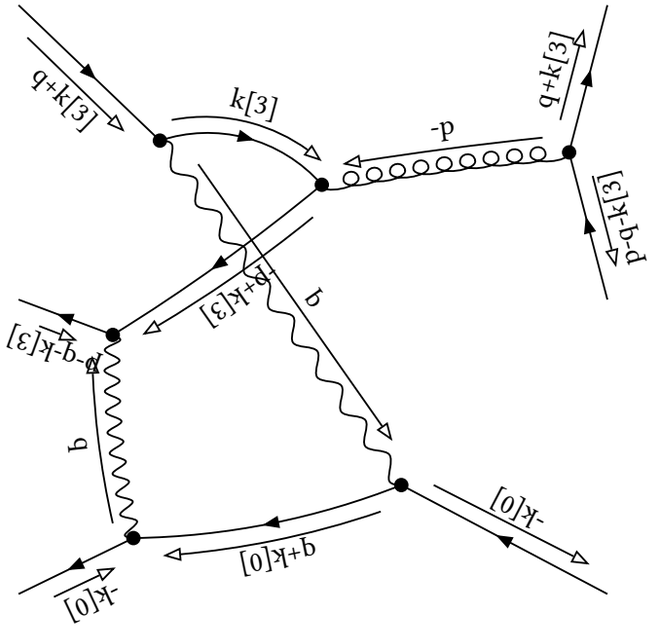
```
-1/2 prop[0,k[3]]^-1 prop[0,q+k[3]]^-1 prop[0,-p+k[3]]^-1 dot[p,p]^-1 dot[p,q]^-1
  +1/2 prop[0,k[3]]^-1 prop[0,q+k[3]]^-1 prop[0,-p+q+k[3]]^-1 dot[p,p]^-1 dot[p,q]^-1
  +1/2 prop[0,k[3]]^-1 prop[0,-p+k[3]]^-1 prop[0,-p+q+k[3]]^-1 dot[p,p]^-1 dot[p,q]^-1
  -1/2 prop[0,q+k[3]]^-1 prop[0,-p+k[3]]^-1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



−3-9



−3-11+13

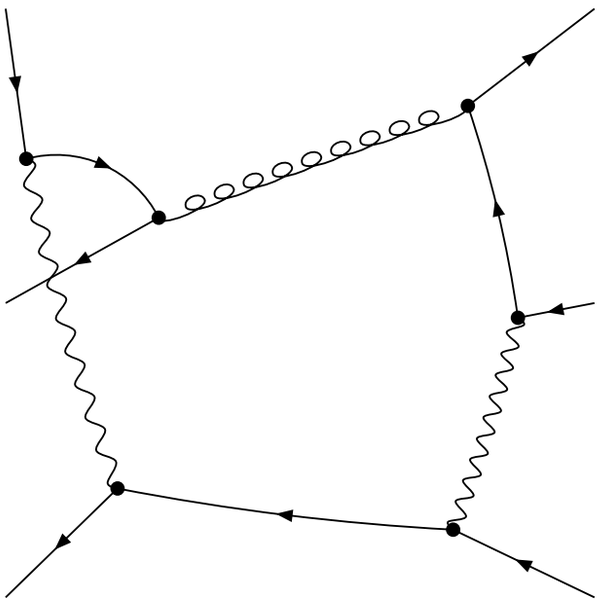


−3-15+17

final

Denominator:

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



−1-11+17

embedding 6 [1, 1, −1, 1] with multiplicity 2

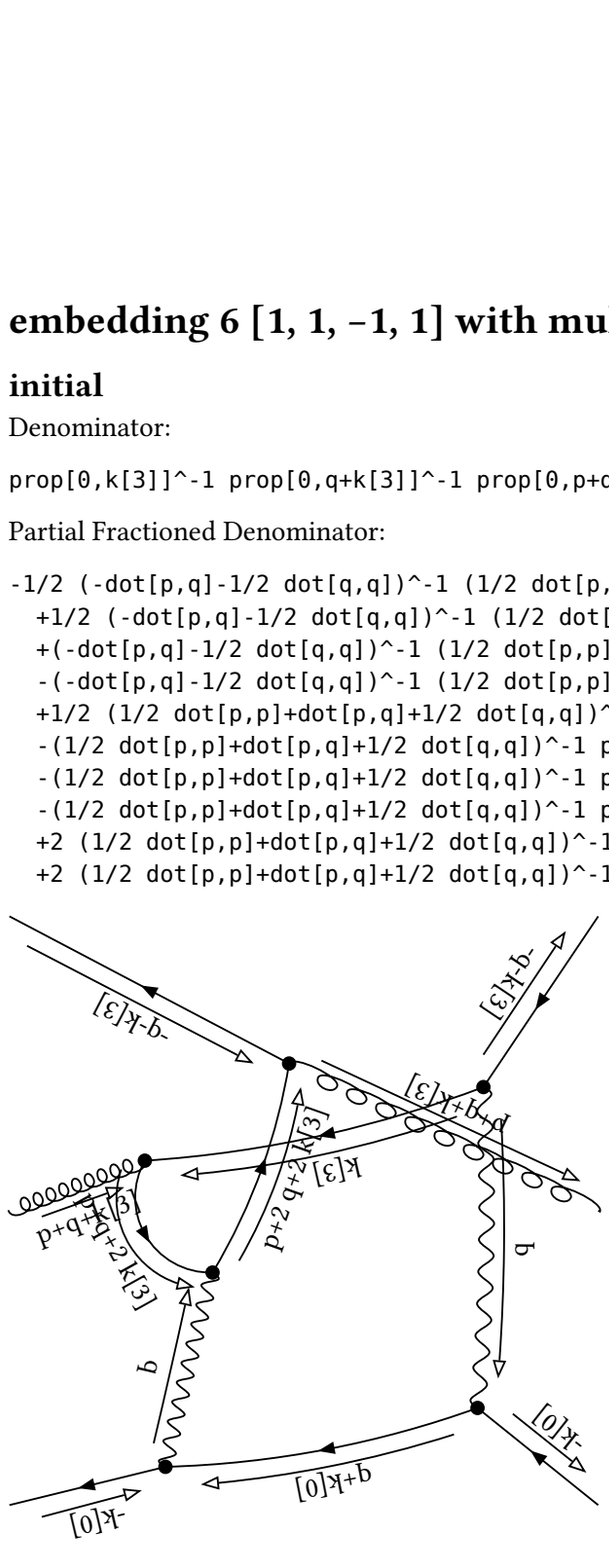
initial

Denominator:

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

Partial Fractioned Denominator:

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

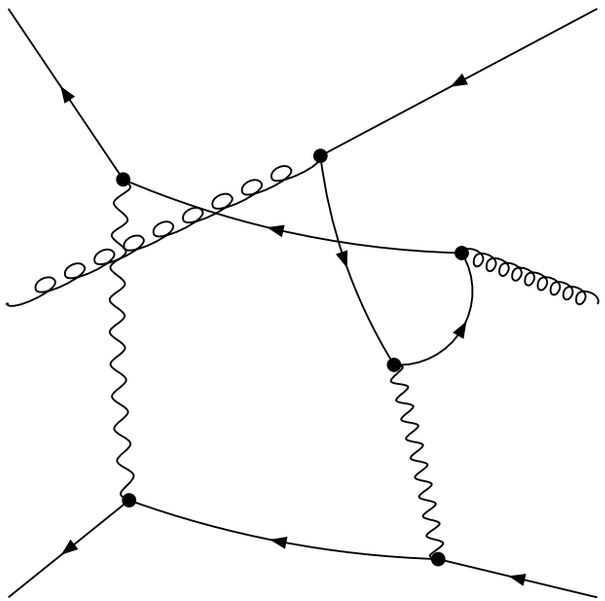


−3+9-17

final

Denominator:

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



−1+9-13

embedding 7 [1, 1, 0, 1] with multiplicity 2

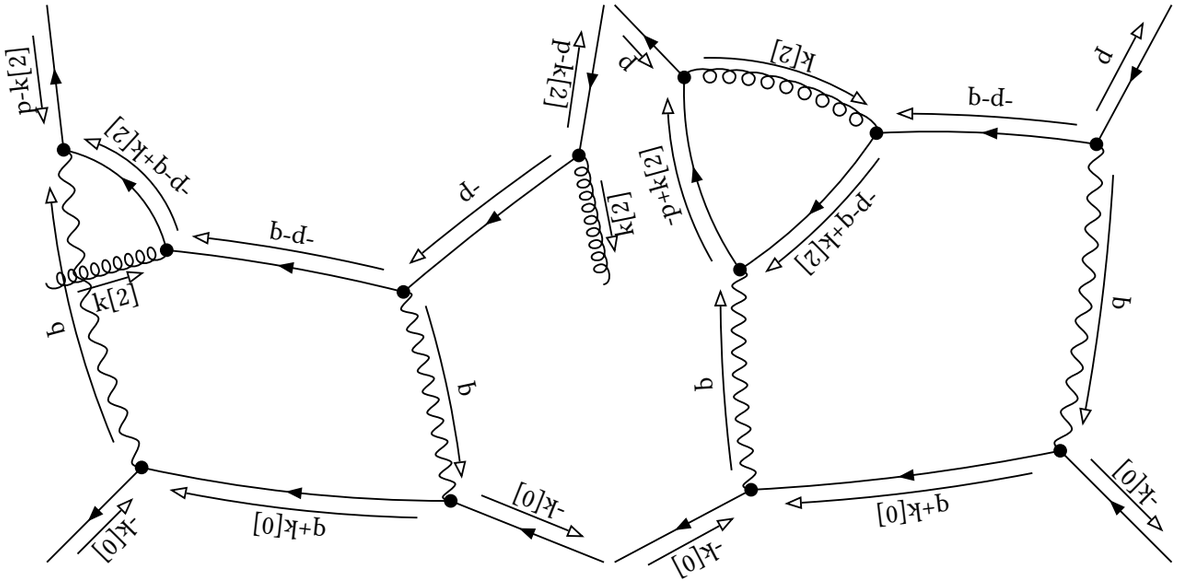
initial

Denominator:

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

Partial Fractioned Denominator:

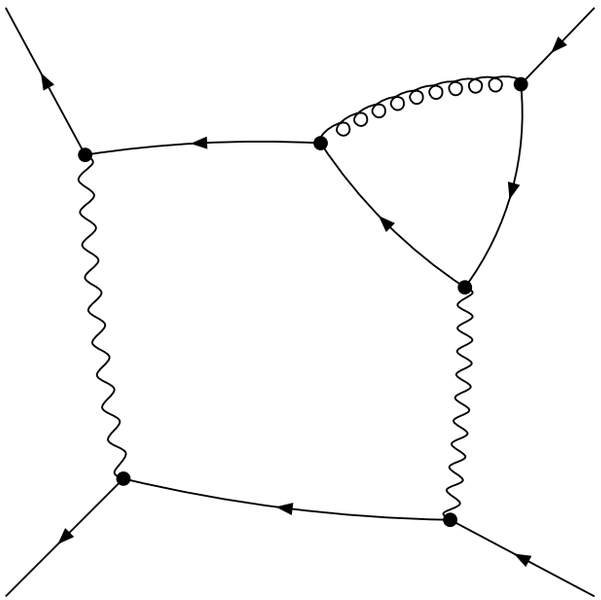
```
(dot[p,p]+2 dot[p,q]+dot[q,q])^-1 prop[0,k[2]]^-1 prop[0,-p+k[2]]^-1 prop[0,-p-q+k[2]]^-1 dot[p,p]^-1
```



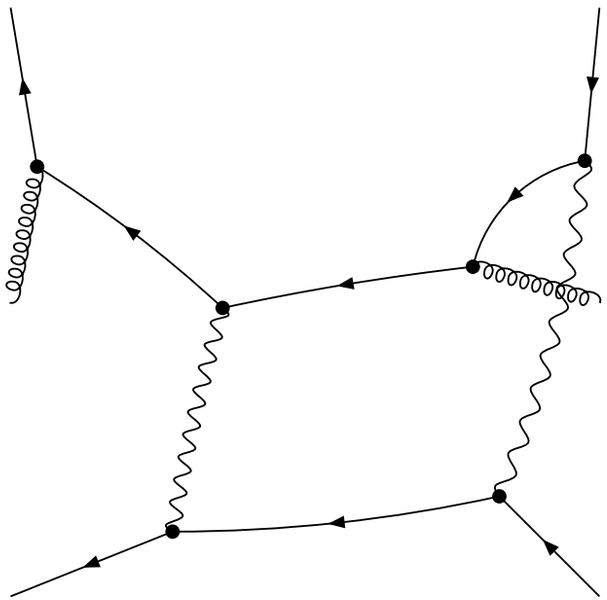
final

Denominator:

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



−1-13



−1+9-11

embedding 8 [1, 1, 1, 2] with multiplicity 2

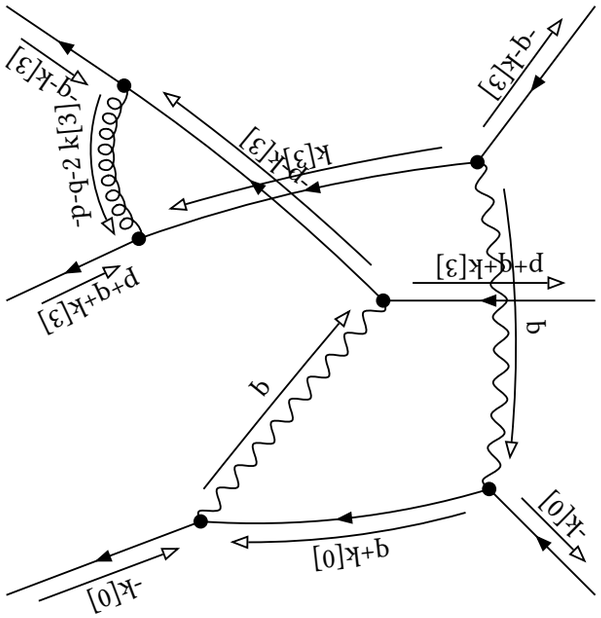
initial

Denominator:

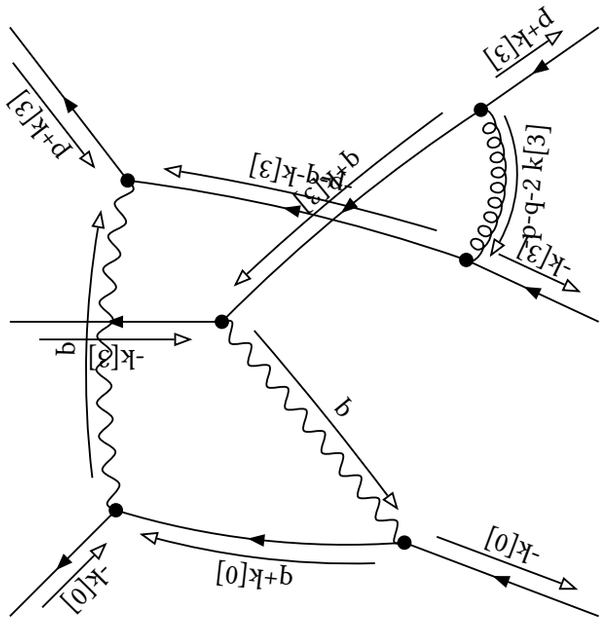
```
prop[0,k[3]]^-1 prop[0,q+k[3]]^-1 prop[0,-p-k[3]]^-1 prop[0,-p-q-k[3]]^-1 prop[0,-p-q-2 k[3]]^-1
```

Partial Fractioned Denominator:

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



–3-11-17

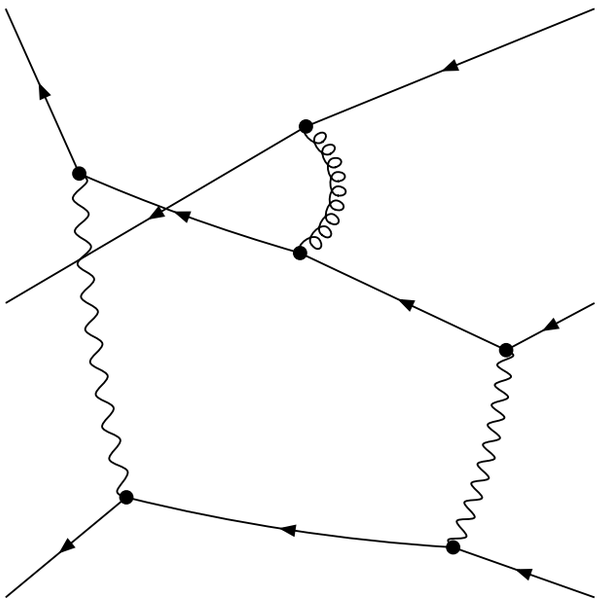


–3-13-15

final

Denominator:

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



−1-11-13