

```
<< KnotTheory`
```

```
Loading KnotTheory` version of February 5, 2013, 3:48:46.4762.
```

```
Read more at http://katlas.org/wiki/KnotTheory.
```

```
SetAttributes[P, Orderless]
```

```
pd = Knot[10, 100] // PD
```

```
KnotTheory::loading: Loading precomputed data in PD4Knots`.
```

```
PD[X[6, 2, 7, 1], X[18, 6, 19, 5], X[20, 13, 1, 14], X[14, 7, 15, 8], X[10, 3, 11, 4],
  X[16, 9, 17, 10], X[4, 11, 5, 12], X[8, 15, 9, 16], X[12, 19, 13, 20], X[2, 18, 3, 17]]
```

```
pd1 = Delete[pd, {{2}, {6}}]
```

```
PD[X[6, 2, 7, 1], X[20, 13, 1, 14], X[14, 7, 15, 8], X[10, 3, 11, 4],
  X[4, 11, 5, 12], X[8, 15, 9, 16], X[12, 19, 13, 20], X[2, 18, 3, 17]]
```

```
Times@@pd1 /. X[i_, j_, k_, l_] => P[i, k] P[j, l] //. P[i_, j_] P[j_, l_] => P[i, l]
```

```
P[5, 19] P[6, 9] P[10, 16] P[17, 18]
```

```
pd2 = Delete[pd, {{2}, {7}}]
```

```
PD[X[6, 2, 7, 1], X[20, 13, 1, 14], X[14, 7, 15, 8], X[10, 3, 11, 4],
  X[16, 9, 17, 10], X[8, 15, 9, 16], X[12, 19, 13, 20], X[2, 18, 3, 17]]
```

```
Times@@pd2 /. X[i_, j_, k_, l_] => P[i, k] P[j, l] //. P[i_, j_] P[j_, l_] => P[i, l]
```

```
P[4, 19] P[6, 11] P[12, 18]
```