

## Exercise 1.10 Relabel free indices

```
1 {a,b,c,d,e,f,u,v,w}::Indices.
2
3 \delta{#}::KroneckerDelta.
4
5 expr := A_{a b c}. # cdb (ex-0110.101,expr)
6
7 expr := \delta^{a}_{u} \delta^{b}_{v} \delta^{c}_{w} @ (expr). # cdb (ex-0110.102,expr)
8
9 eliminate_kronecker (expr) # cdb (ex-0110.103,expr)
```

$$A_{abc} \quad (\text{ex-0110.101})$$

$$\delta^a_u \delta^b_v \delta^c_w A_{abc} \quad (\text{ex-0110.102})$$

$$A_{uvw} \quad (\text{ex-0110.103})$$