

## Exercise 5.2 Leading factors forbidden in patterns

This exercise will raise a Cadabra run-time error – the scale factor on the left hand side of the rule (3 in this case) is not allowed.

```
1 {a,b,c,d,e,f,g,h,i,j,k,l,m,n,o,p,q,r,s,t,u#}::Indices(position=independent).
2
3 expr := 2 V_{a b} - 3 V_{b a}.                # cdb (ex-0502.100,expr)
4
5 substitute (expr, $3 V_{b a} -> - 3 V_{a b}$)  # cdb (ex-0502.101,expr)
```

Traceback (most recent call last):

File "/usr/local/bin/cadabra2", line 248, in <module>

exec(cmp)

File "ex-0502.py", line 18, in <module>

substitute (expr, Ex(r'''3 V\_{b a} -> - 3 V\_{a b}''', False))

RuntimeError: substitute: Index error in replacement rule.

substitute: No numerical pre-factors allowed on lhs of replacement rule.