

## Lösungen zu Prolog

### Aufgabe 1

```
% Aufgabe 1.1
evenLength ( []).
evenLength ( [_ | [_ | Xs]] ) :- evenLength ( Xs ).
```

```
% Aufgabe 1.2
pow2Length ( [ 1 ] ).
pow2Length ( Xs ) :- Xs = [ 1 | _ ] , append ( Ys , Ys , Xs ) , pow2Length ( Ys ).
```

### Aufgabe 2

1.  $\sigma = [P \text{ } \text{ } Q, Y \text{ } 1, Z \text{ } 7, W \text{ } [4], T \text{ } g(3,X)]$ .
2.  $\sigma = [P \text{ } g(Y,7), Z \text{ } [3,g(Y,7)], Q \text{ } 4]$ .
3.  $\sigma = [L \text{ } 1, X \text{ } g(1,1), Y \text{ } g(g(1,1),g(1,1)), Z \text{ } g(g(g(1,1),g(1,1)),g(g(1,1),g(1,1)))]$ .