

```
 $\omega_2 [v_] [p_] := \text{Module} [\{q = \text{Expand}[p], n, c\},$   
  If [ $q == \theta$ ,  $\theta$ ,  
     $c = \text{Coefficient}[q, \omega, n = \text{Exponent}[q, \omega]]$ ;  
     $c v^n + \omega_2 [v] [q - c (\omega + \omega^{-1})^n]]$ ];
```