

```
> restart : with(LinearAlgebra) :  
=>  
> f := x→sqrt((x + 4)3)  
  
f := x ↦ √(x + 4)3 (1)  
=>  
> taylor_series := taylor(f(x), x, 4)  
  
taylor_series := 8 + 3x +  $\frac{3}{16}x^2 - \frac{1}{128}x^3 + O(x^4)$  (2)  
=>  
> # For x=1  
=> evalf( $8 + 3 + \frac{3}{16}$ )  
  
11.18750000 (3)  
=>  
> error_1 := evalf( $\frac{1}{128} \cdot 1$ )  
  
error_1 := 0.007812500000 (4)  
=>
```