

# An apparent bug in taylor (series)

First invocation returns too many terms ...

```
[> Order;
[> taylor(sqrt(1+x),x);
1 +  $\frac{1}{2}x - \frac{1}{8}x^2 + \frac{1}{16}x^3 - \frac{5}{128}x^4 + \frac{7}{256}x^5 - \frac{21}{1024}x^6 + \frac{33}{2048}x^7 +$ 
O( $x^8$ )
```

... but the second time, the result is correct.

```
[> taylor(sqrt(1+x),x);
1 +  $\frac{1}{2}x - \frac{1}{8}x^2 + \frac{1}{16}x^3 - \frac{5}{128}x^4 + \frac{7}{256}x^5 + O(x^6)$ 
```