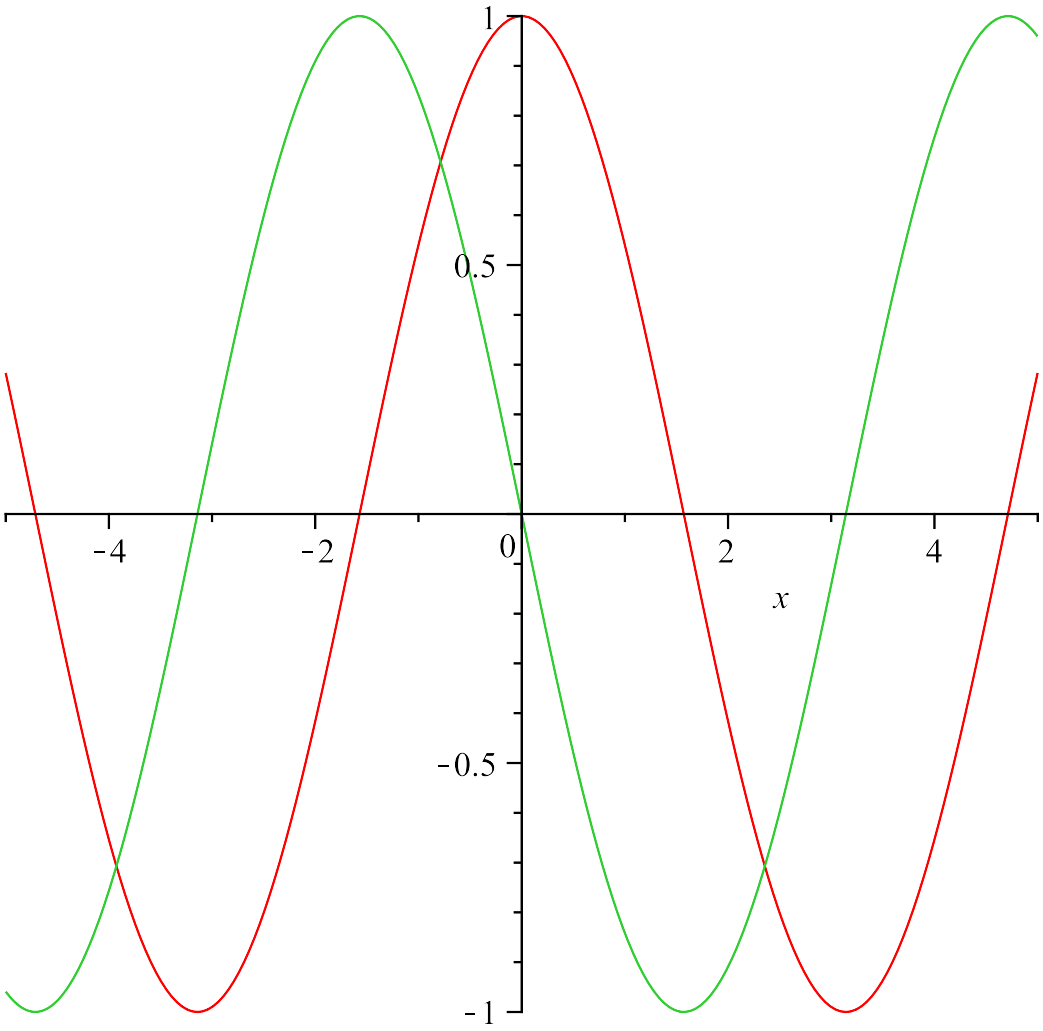
```
> restart;
>  y := cos(x);
> yp:=diff(y,x);
```

$$y := \cos(x)$$
$$yp := -\sin(x) \quad \textbf{(1)}$$

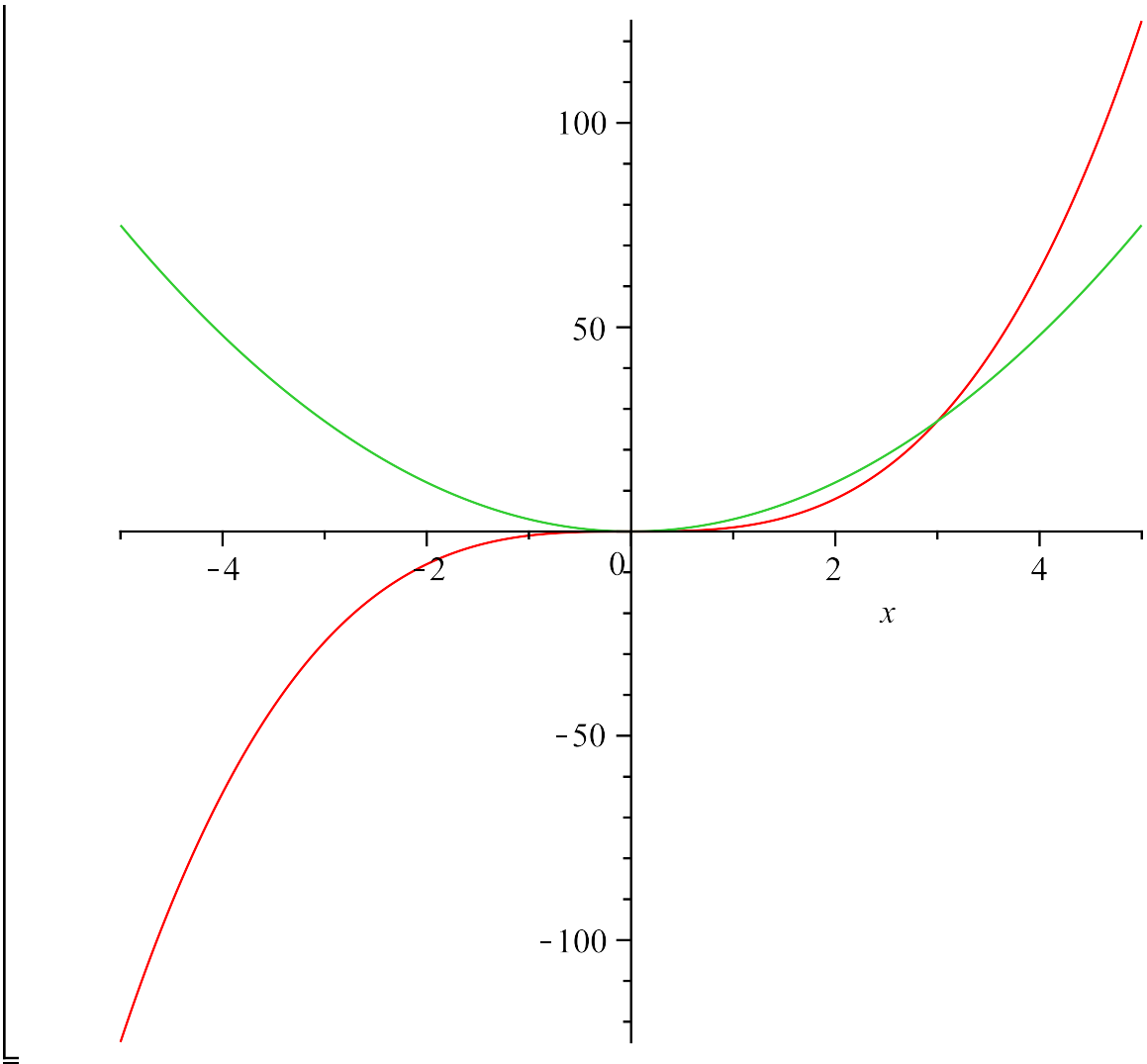
```
> plot( [y,yp], x=-5..5 );
```




```
> plotdiff := proc(y,x,a,b)
>  local yp;
>  yp := diff(y,x);
>  plot( [y, yp], x=a..b );
>  end proc;
```

$$plotdiff := \textbf{proc}(y, x, a, b)\ \textbf{local}\ yp;\ yp := diff(y, x);\ plot([y, yp], x = a..b)\ \textbf{end proc} \quad \textbf{(2)}$$

```
> plotdiff(x^3,x,-5,5);
```


100
50
-50
-100
-4
-2
0
2
4
x