

Joe College  
September 22, 2006

## Mixing Text and Mathematics

This worksheet contains examples of text blocks (like this one) and execution groups containing input and output like the following.

```
> y := sin(x)/x;
```

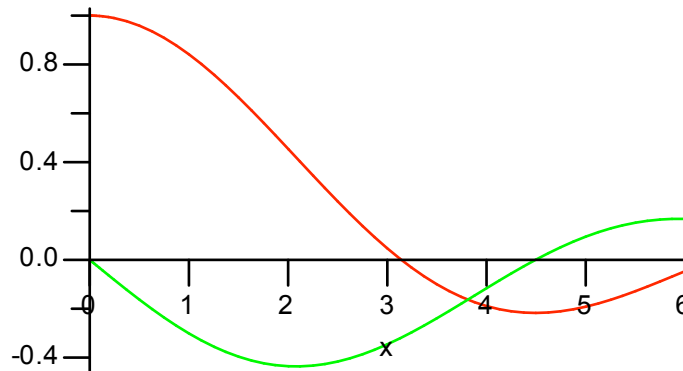
$$y := \frac{\sin(x)}{x} \quad (1)$$

```
> z := diff(y,x);
```

$$z := \frac{\cos(x)}{x} - \frac{\sin(x)}{x^2} \quad (2)$$

z is the derivative of y. Both z and y are plotted below. Which one is which? How can you tell?

```
> plot([y,z], x=0..6);
```



The red curve is y, the green curve is z.

I can tell because the green curve is zero when the red curve has a horizontal tangent.

```
> Y := int(z,x);
```

$$Y := \frac{\sin(x)}{x} \quad (3)$$

Well, that wasn't hard. Now I know how to enter text and mathematics in Maple.