

Maple Worksheet: Chapter 1 direction fields

Maple file to produce the direction fields in Exercises 27 and 29, Section 1.1.

You can execute all the commands at once by pressing the triple exclamation point button, !!!

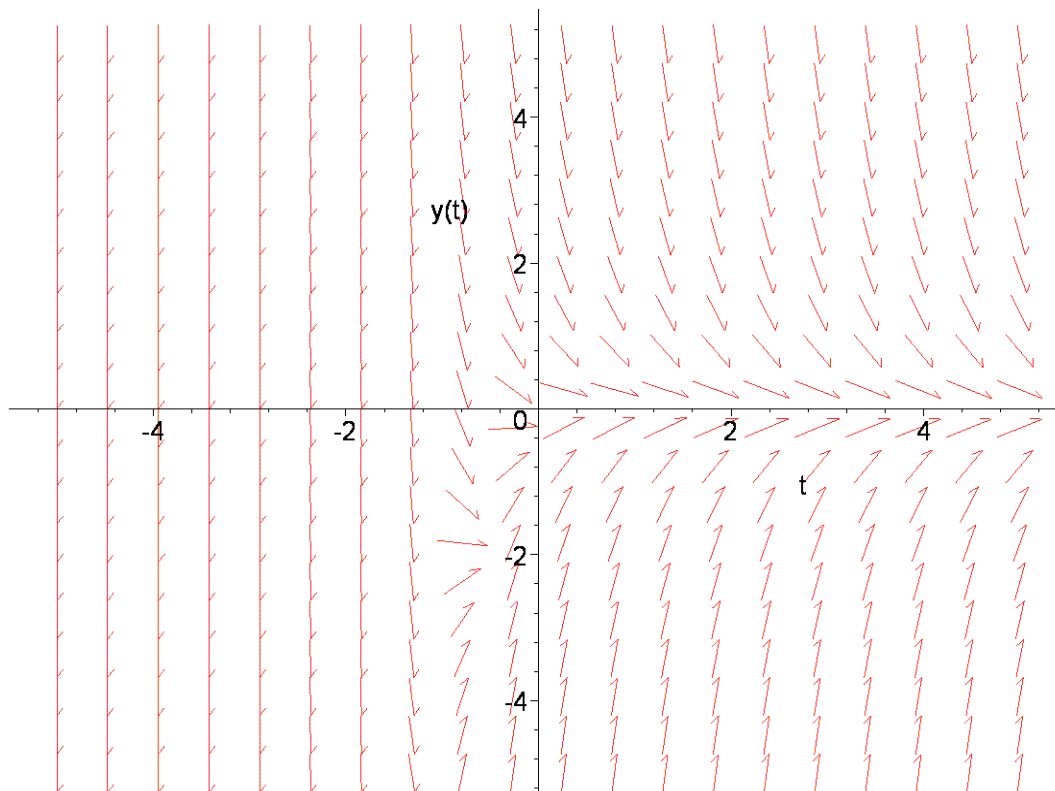
```
> restart;  
> with(plots):  
Warning, the name changecoords has been redefined
```

```
> with(DEtools):  
> DE27:=diff(y(t),t)=t*exp(-2*t)-2*y(t);  
DE29:=diff(y(t),t)=t+2*y(t);
```

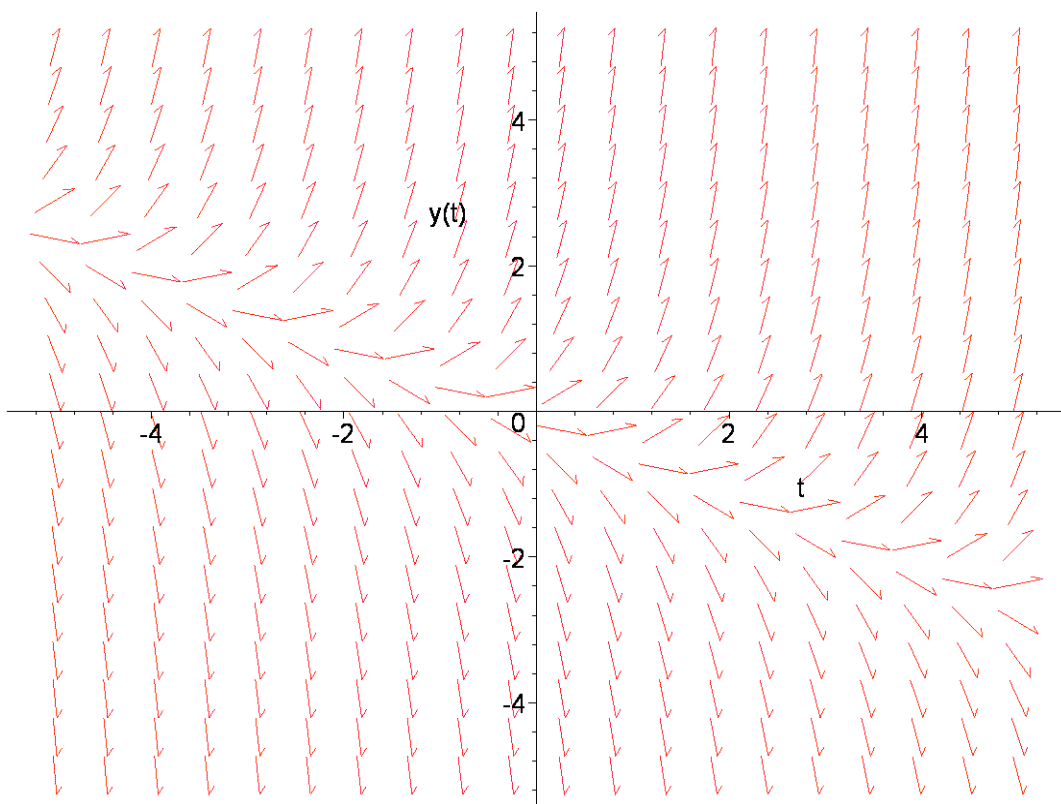
$$DE27 := \frac{\partial}{\partial t} y(t) = t e^{(-2t)} - 2 y(t)$$

$$DE29 := \frac{\partial}{\partial t} y(t) = t + 2 y(t)$$

```
> DEplot(DE27, y(t), t=-5..5, y=-5..5);
```



```
> DEplot(DE29, y(t), t=-5..5, y=-5..5);
```



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