

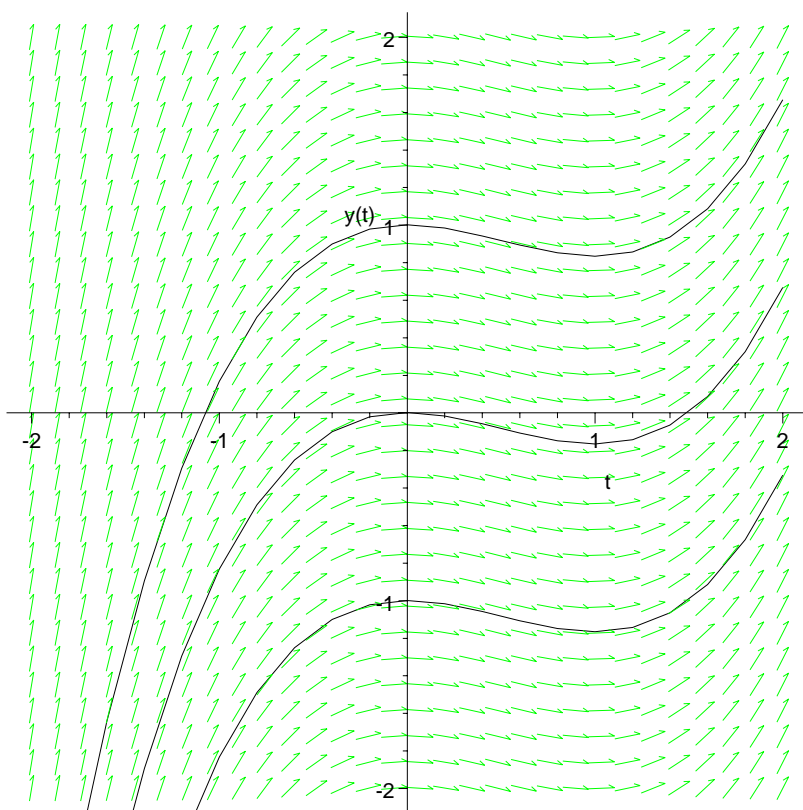
```

[ > with(plots): with(DEtools):
[ > initval:={ [y(0)=-1],[y(0)=0],[y(0)=1] };
      initval := { [y(0)=-1],[y(0)=0],[y(0)=1] }
[ > del:=diff(y(t),t)=t^2-t;DEplot(del,y(t),t=-2..2,initval,y(t)=-2..2
  ,linecolor=black,color=green,dirgrid=[30,30],title="1.3#1");

```

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

1.3#1

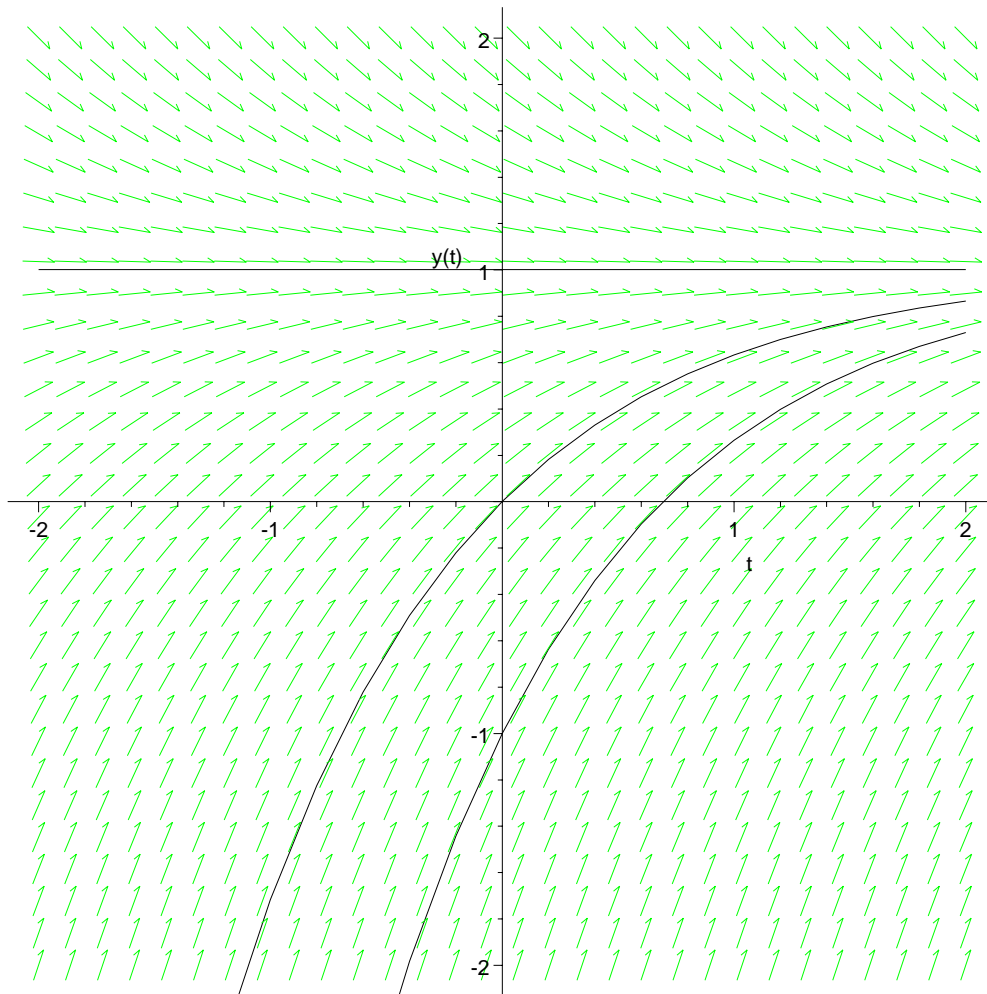


[**Problem 2.**

```
> de2:=diff(y(t),t)=1-y(t);DEplot(de2,y(t),t=-2..2,initval,y(t)=-2..2,linewidth=black,color=green,dirgrid=[30,30],title="1.3#2");
```

$$de2 := \frac{\partial}{\partial t} y(t) = 1 - y(t)$$

1.3#2

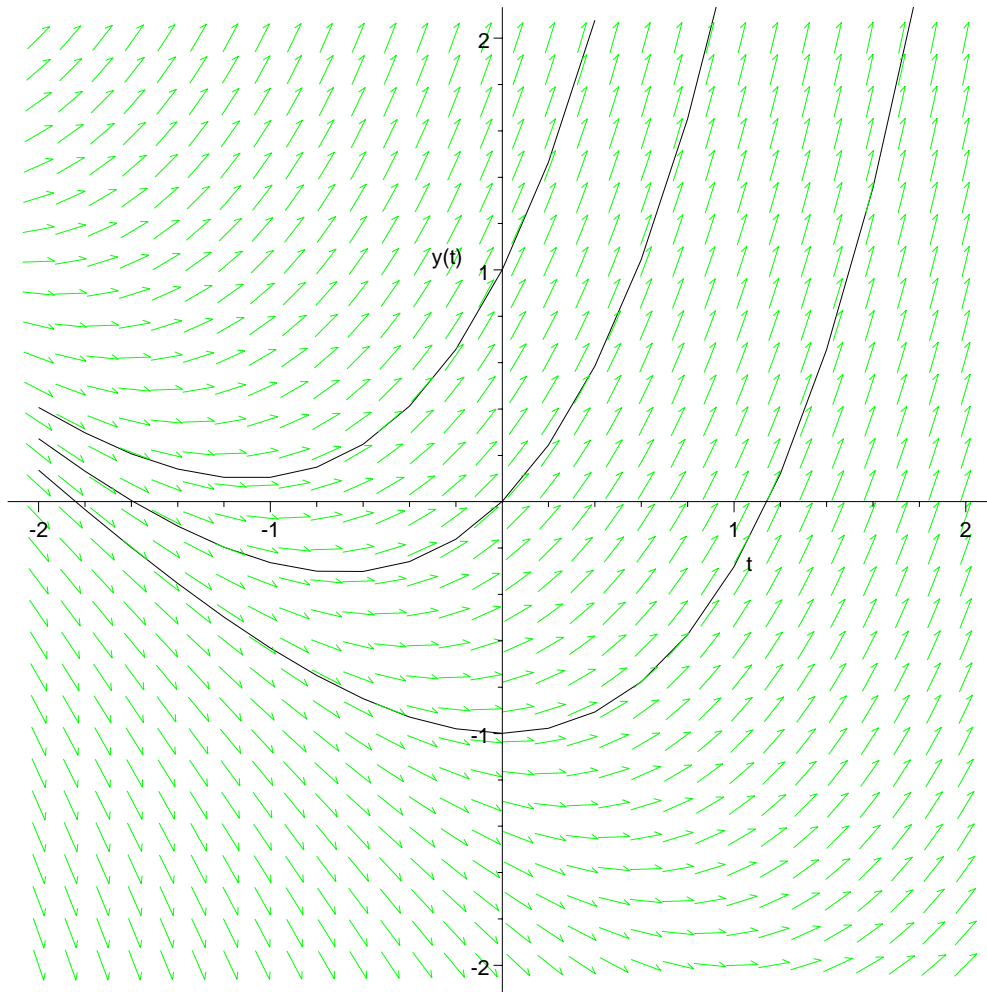


[**Problem 3:**

```
> de3:=diff(y(t),t)=y(t)+t+1;DEplot(de3,y(t),t=-2..2,initval,y(t)=-2  
..2,linecolor=black,color=green,dirgrid=[30,30],title="1.3#3");
```

$$de3 := \frac{\partial}{\partial t} y(t) = y(t) + t + 1$$

1.3#3

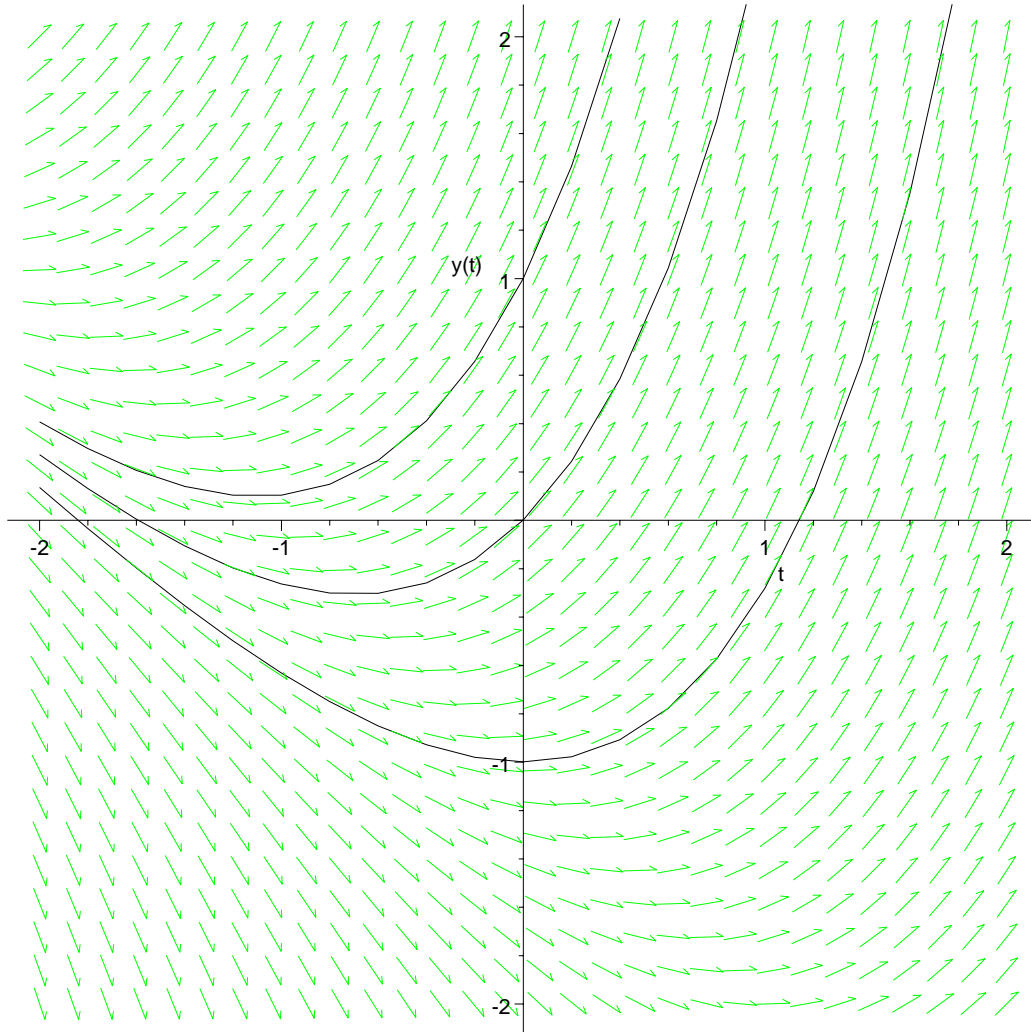


[**Problem 6:**

```
> de6:=diff(y(t),t)=y(t)+t+1;DEplot(de6,y(t),t=-2..2,initval,y(t)=-2..2,linewidth=black,color=green,dirgrid=[30,30],title="1.3#6");
```

$$de6 := \frac{\partial}{\partial t} y(t) = y(t) + t + 1$$

1.3#6

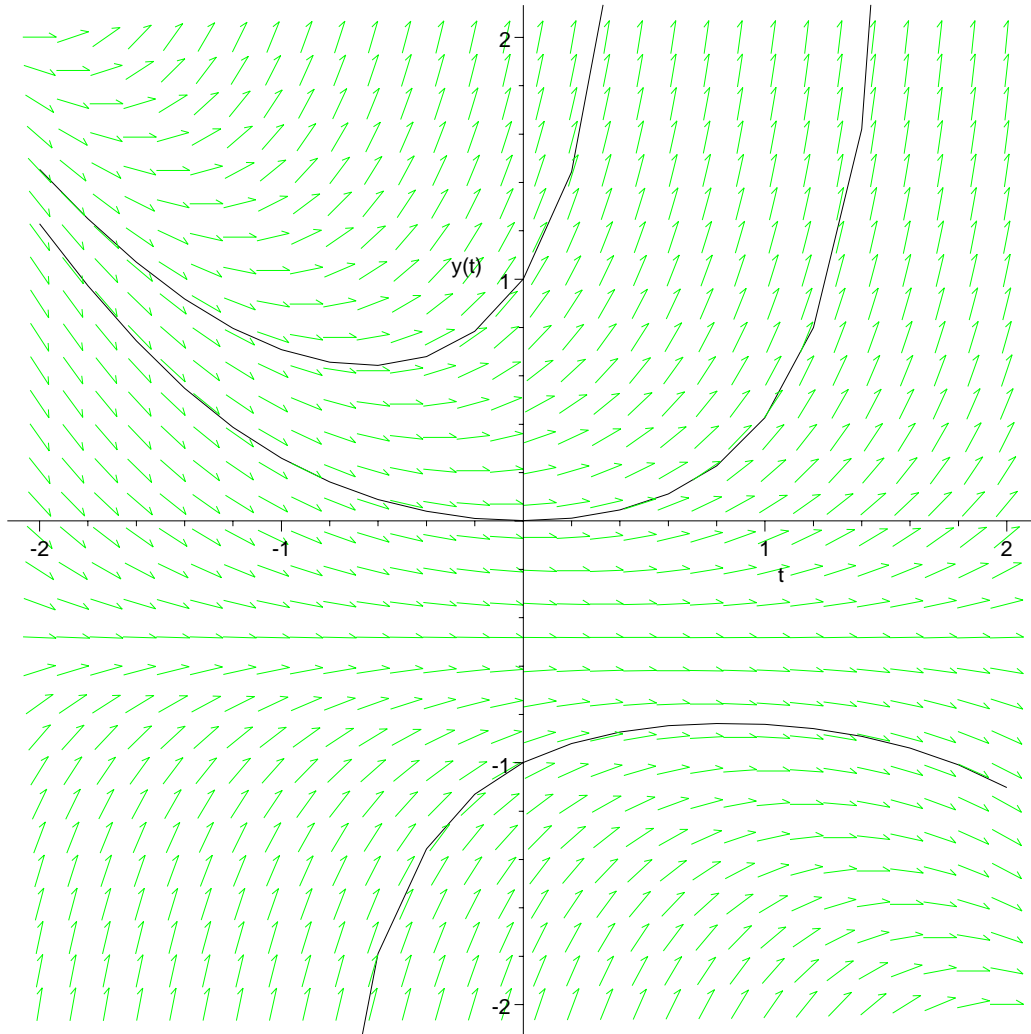


[**Problem 9:**

```
> de9:=diff(y(t),t)=(y(t)+1/2)*(y(t)+t);DEplot(de9,y(t),t=-2..2,init  
val,y(t)=-2..2,linecolor=black,color=green,dirgrid=[30,30],title="1.3#9");
```

$$de9 := \frac{\partial}{\partial t} y(t) = \left(y(t) + \frac{1}{2} \right) (y(t) + t)$$

1.3#9



[>