

## Mathematica instructions for Problem 20, HW 11

To plot two functions on the same axes, we use the command **Plot**. For example, plot the functions  $f(t) = \sin t$  and  $g(t) = \sqrt{t}$  on the same axes:

```
f[t_] := Sin[t]
g[t_] := Sqrt[t]
Plot[{f[t], g[t]}, {t, 0, 1}, PlotLegends -> "Expressions"]
```

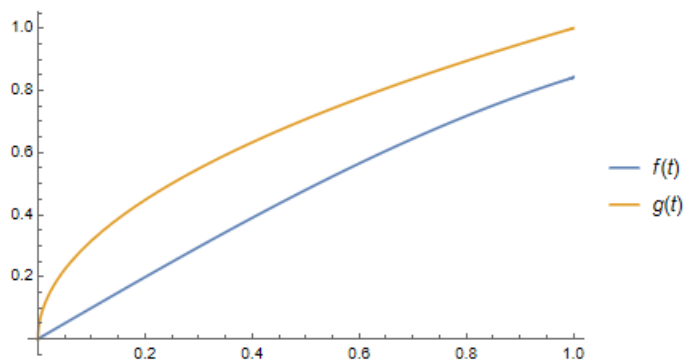


Figure 1

To plot parametrically two functions  $f(t)$  and  $g(t)$  means to plot the curve whose parametric equation is  $x = f(t)$ ,  $y = g(t)$ . On Mathematica, we use the command **ParametricPlot**.

```
ParametricPlot[{f[t], g[t]}, {t, 0, 4}]
```

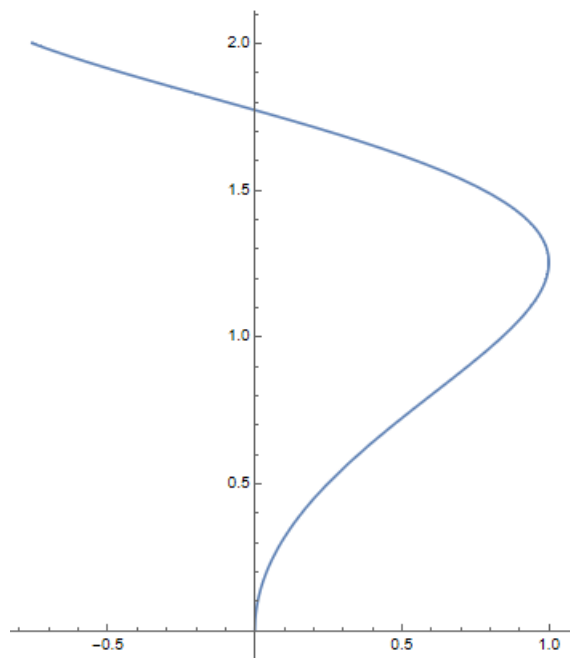


Figure 2