In[ ]:=
```
Clear[x]
```

In[ ]:=
```
k1 = 1.386; k2 = 0.1386;
hours = 15;
de1 = x'[t] == -k1 * x[t]
sol1 = DSolve[{de1, x[0] == x0}, x[t], t]
x0 = 1;
x[t] = First[x[t] /. sol1]
de2 = y'[t] == k1 * x[t] - k2 * y[t];
sol2 = DSolve[{de2, y[0] == y0}, y[t], t]
y0 = 0;
plot1 = Plot[x[t] /. sol1, {t, 0, hours}, PlotRange → {0, 1}, PlotLabel → "Plot1"];
plot2 = Plot[y[t] /. sol2, {t, 0, hours}, PlotRange → {0, 0.9}, PlotLabel → "Plot2"];
GraphicsArray[{plot1, plot2}, Frame → True]
```

Out[ ]= $x'[t] == -1.386\, x[t]$

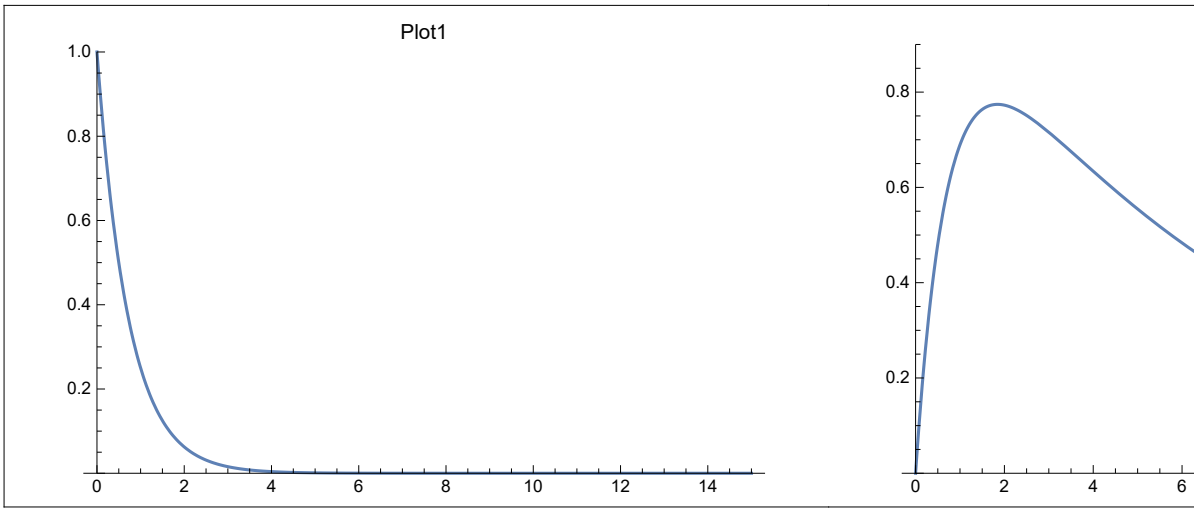
Out[ ]= $\{\{x[t] \to 1.\, e^{-1.386\, t}\}\}$

Out[ ]= $1.\, e^{-1.386\, t}$

Out[ ]= $\{\{y[t] \to 1.11111\, e^{-1.5246\, t}\, (-1.\, e^{0.1386\, t} + 1.\, e^{1.386\, t})\}\}$

GraphicsArray: GraphicsArray is obsolete. Switching to GraphicsGrid.

Out[ ]=



Course of pill

```
Clear[x]
```

In[•]:=
```
k1 = 1.386; k2 = 0.1386; i = 2;
hours = 60;
de1 = x'[t] == i - k1 * x[t]
sol1 = DSolve[{de1, x[0] == x0}, x[t], t]
x0 = 1;
x[t] = First[x[t] /. sol1]
de2 = y'[t] == k1 * x[t] - k2 * y[t];
sol2 = DSolve[{de2, y[0] == y0}, y[t], t]
y0 = 0;
plot1 = Plot[x[t] /. sol1, {t, 0, hours}, PlotRange → {0, 1.6}, PlotLabel → "Plot1"];
plot2 = Plot[y[t] /. sol2, {t, 0, hours}, PlotRange → {0, 35}, PlotLabel → "Plot2"];
GraphicsArray[{plot1, plot2}, Frame → True]
```

Out[•]= $x'[t] == 2 - 1.386\, x[t]$

Out[•]= $\{\{x[t] \to 1.443\, e^{-1.386\, t}\, (-0.307 + 1.\, e^{1.386\, t})\}\}$

Out[•]= $1.443\, e^{-1.386\, t}\, (-0.307 + 1.\, e^{1.386\, t})$

Out[•]= $\{\{y[t] \to 14.43\, e^{-1.386\, t}\, (0.0341111 - 1.03411\, e^{1.2474\, t} + 1.\, e^{1.386\, t})\}\}$

GraphicsArray: GraphicsArray is obsolete. Switching to GraphicsGrid.

Out[•]=