```
In[ ]:=   y[x_] = c * Exp[x^2]
          Simplify[y'[x] - 2 * x * y[x] == 0]
```
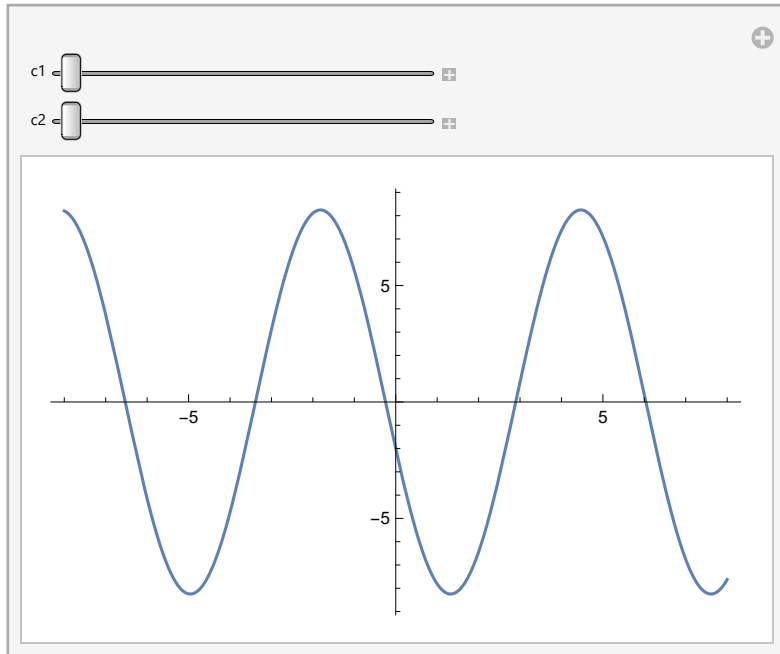
Out[ ]=

$$c \, e^{x^2}$$

Out[ ]=

True

In[ ]:= **x[t_] = c1 * Sin[t] + c2 * Cos[t]**

Out[ ]=

c2 Cos[t] + c1 Sin[t]

In[ ]:= **Manipulate[Plot[c2 Cos[t] + c1 Sin[t], {t, -8, 8}], {c1, -8, 8}, {c2, -2, 2}]**

Out[ ]=

In[ ]:= **Simplify[x''[t] + x[t] == 0]**

Out[ ]=

True

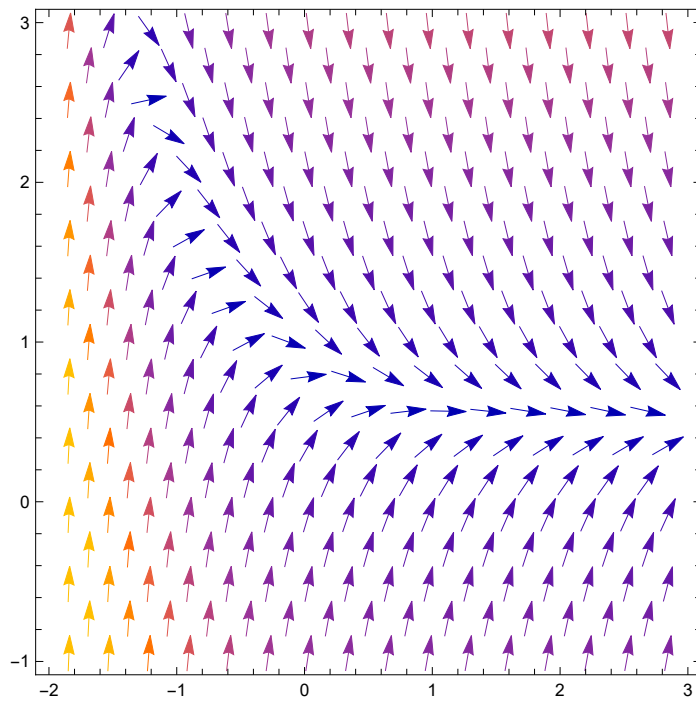*In[ ]:=* **x'[t_] = 3 / 2 - 3 * x + Exp[-3 * t / 2]**

··· **Set**: Tag Plus in $\left(\frac{3}{2} + e^{-3\,t/2} - 3\,x\right)[t\_]$ is Protected.

Out[ ]=

$$\frac{3}{2} + e^{-3\,t/2} - 3\,x$$

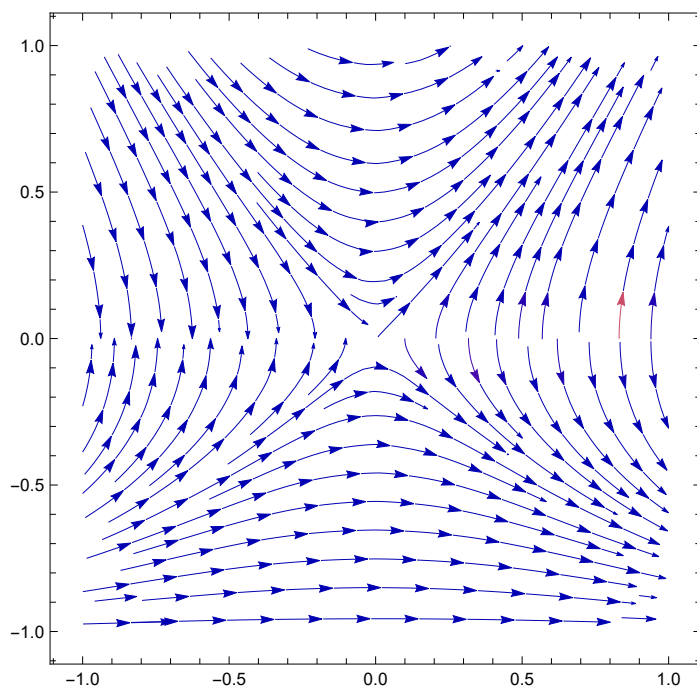*In[ ]:=* **VectorPlot[{1, 3 / 2 - 3 * x + Exp[-3 * t / 2]}, {t, -2, 3}, {x, -1, 3}]**

Out[ ]=

VectorPlot[{1, x + x / y}, {x, -2, 3}, {y, -1, 3}]
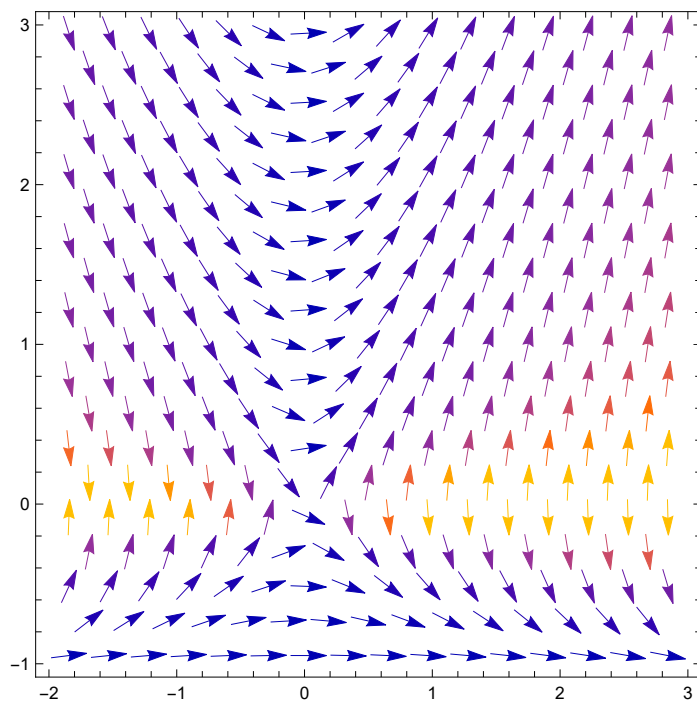
StreamPlot[{1, x + x / y}, {x, -1, 1}, {y, -1, 1}]

In[16]:= `DSolve[p'[x] == k*p[x], p[x], x]`
rozwiązywanie równań różniczkowych

Out[16]= $\{\{p[x] \to e^{kx} c_1\}\}$