

Test.wl script

```
In[1]:= sol1 = DSolve[{D[y[x, t], t] + 2 D[y[x, t], x] == Sin[x], y[0, t] ==  
Cos[t]], y[x, t], {x, t]}
```

```
sol2 = sol1[[1, 1, 2]]
```

```
Plot3D[sol2, {x, -10, 10}, {t, -5, 5}]
```

```
Out[1]= {{y[x, t] →  $\frac{1}{2} \left( 1 + 2 \cos\left[t - \frac{x}{2}\right] - \cos[x] \right)}}$ 
```

```
Out[3]=  $\frac{1}{2} \left( 1 + 2 \cos\left[t - \frac{x}{2}\right] - \cos[x] \right)$ 
```

