

Test.wl

1 Test Formula and Plot

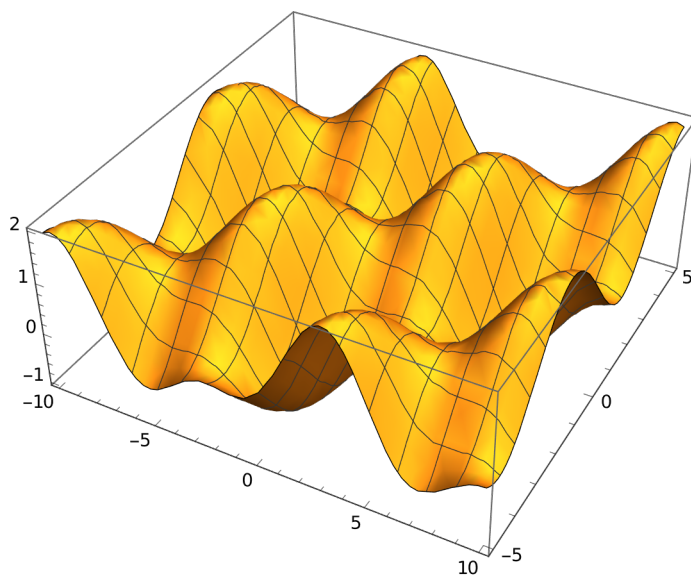
```
In[ ]:= sol1 = DSolve[{ $\partial_t y[x, t] + 2 \partial_x y[x, t] == \sin[x]$ ,  $y[0, t] == \cos[t]$ },  $y[x, t]$ , { $x, t$ }]
```

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

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

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

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



2 Test Manipulate

```
In[ ]:= Manipulate[Plot[Sin[n x], {x, 0, 2  $\pi$ }], {n, 1, 20}]
```

