In[81]:=

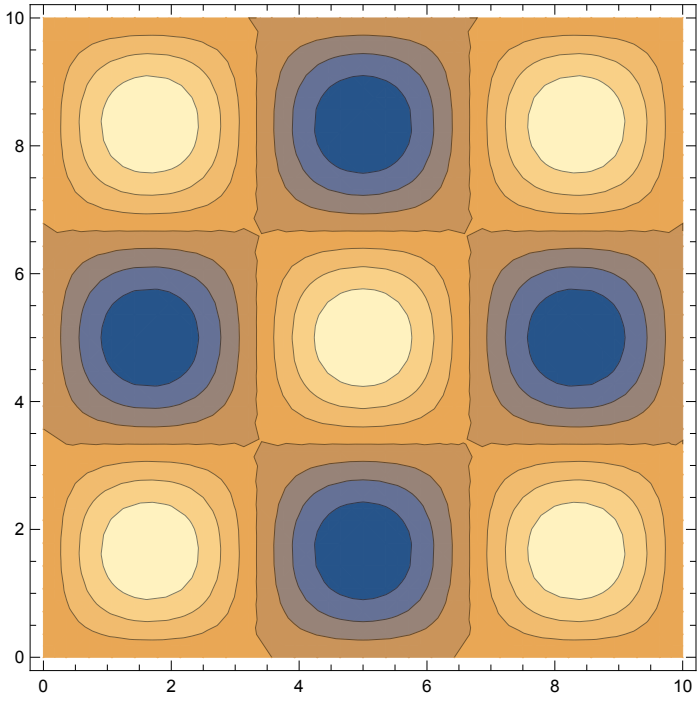
$$\psi[x\_, nx\_] := \sqrt{\frac{2}{L}} * \text{Sin}\left[\frac{nx * \pi}{L} x\right];$$

$$\psi[y\_, ny\_] := \sqrt{\frac{2}{L}} * \text{Sin}\left[\frac{ny * \pi}{L} y\right];$$

$$\psi[z\_, nz\_] := \sqrt{\frac{2}{L}} * \text{Sin}\left[\frac{nz * \pi}{L} z\right];$$

```
L = 10;
ContourPlot[ψ[x, 3] × ψ[y, 3], {x, 0, 10}, {y, 0, 10}]
```

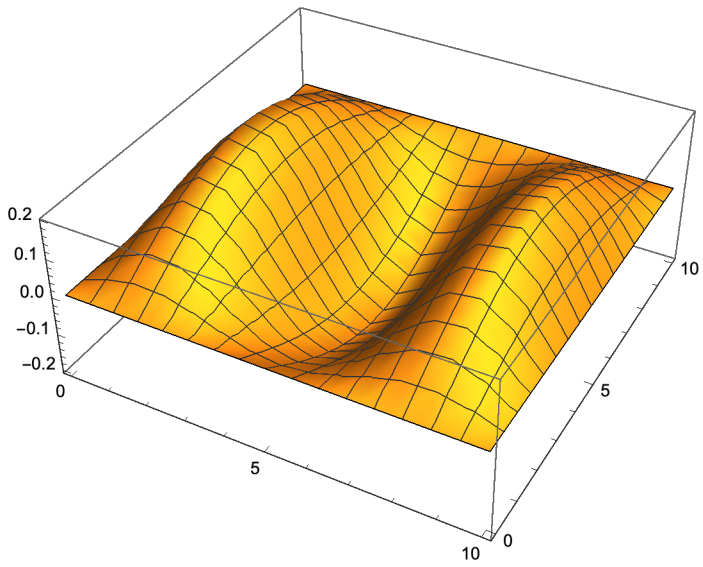
Out[85]=



In[87]:=

```
Plot3D[ψ[x, 3] × ψ[y, 1], {x, 0, 10}, {y, 0, 10}]
```

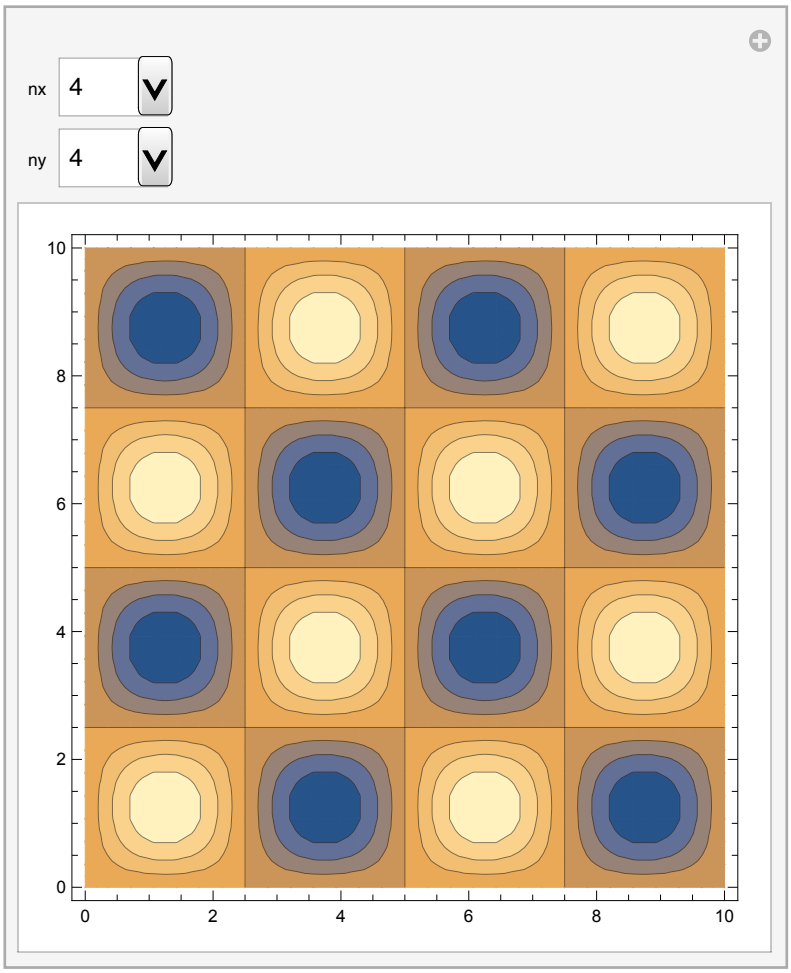
Out[87]=



In[88]:=

```
Manipulate[ContourPlot[ψ[x, nx] × ψ[y, ny], {x, 0, 10}, {y, 0, 10}],
 {nx, 1, 10, 1}, {ny, 1, 10, 1}, ControlType → PopupMenu]
```

Out[88]=



In[89]:=
```
Manipulate[Plot3D[ψ[x, nx] × ψ[y, ny], {x, 0, 10}, {y, 0, 10}],
 {nx, 1, 10, 1}, {ny, 1, 10, 1}, ControlType → PopupMenu]
```

Out[89]=