

# Tuples

<https://reference.wolfram.com/language/ref/Tuples.html>

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## Mathematics

```
In[n]:= Tuples[{0, 1}, 3]
```

```
Out[n]=  
{ {0, 0, 0}, {0, 0, 1}, {0, 1, 0}, {0, 1, 1}, {1, 0, 0}, {1, 0, 1}, {1, 1, 0}, {1, 1, 1} }
```

```
In[n]:= Tuples[{1, 0}, 3]
```

```
Out[n]=  
{ {1, 1, 1}, {1, 1, 0}, {1, 0, 1}, {1, 0, 0}, {0, 1, 1}, {0, 1, 0}, {0, 0, 1}, {0, 0, 0} }
```

```
In[n]:= Tuples[{"John", "Mary", "Sally"}, 2]
```

```
Out[n]=  
{ {John, John}, {John, Mary}, {John, Sally}, {Mary, John},  
  {Mary, Mary}, {Mary, Sally}, {Sally, John}, {Sally, Mary}, {Sally, Sally} }
```

# Multiway Systems

```
In[ ]:= Graph[ResourceFunction["MultiwaySystem"] [
  {"A" → "BBB", "BB" → "A"}, "A", 7, "StatesGraph"], AspectRatio → 1.5]
```

Out[ ]:=

