Review

1. ListPlot[list]

2. listname[[n,m]]

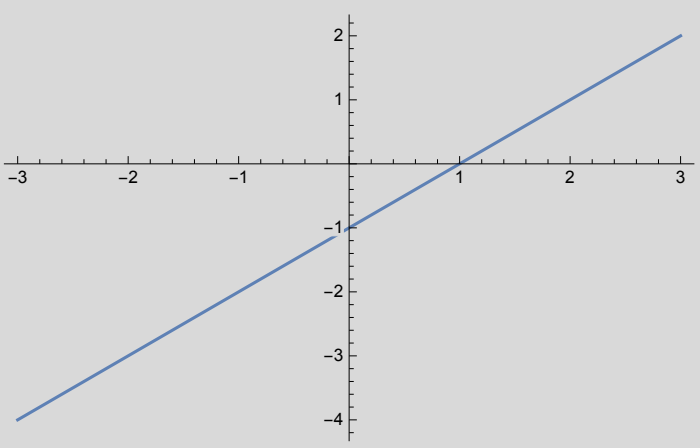
3. Table[f[n] , {n, {list of values}}]

FindRoot

In[18]:=
```
FindRoot[function[x], {x, guess}]
```

In[35]:=
```
Plot[x - 1, {x, -3, 3}]
```

Out[35]=



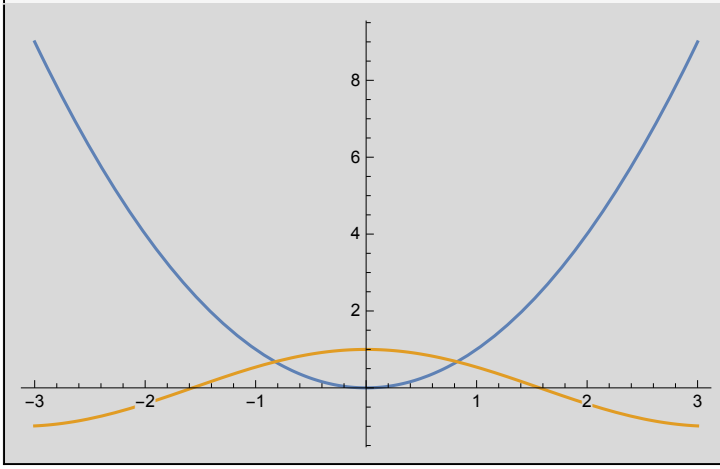
In[19]:=
```
FindRoot[x - 1, {x, 0.5}]
```

Out[19]=
```
{x → 1.}
```

Application of FindRoot

In[20]:=
```
Plot[{x^2, Cos[x]}, {x, -3, 3}]
```

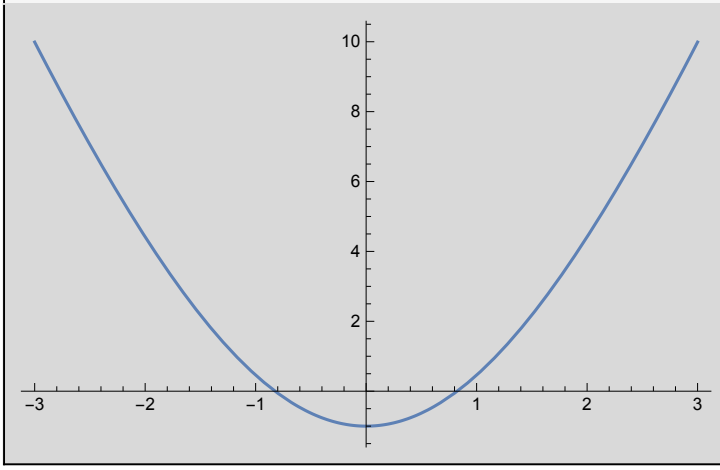
Out[20]=



In[21]:=
```
f[x_] := x^2 - Cos[x]
```

In[22]:=
```
Plot[f[x], {x, -3, 3}]
```

Out[22]=



In[23]:=
```
FindRoot[f[x], {x, -0.8}]
```

Out[23]=
```
{x → -0.824132}
```

In[24]:=
```
FindFunc[guess_] := FindRoot[f[x], {x, guess}]
```

Method 1:

In[25]:=
```
FindFunc[-0.8]
```

Out[25]=
```
{x → -0.824132}
```

```
FindFunc[0.8]
```

Out[26]=
```
{x → 0.824132}
```

Method 2:

In[36]:=
```
list = {-0.8, 0.8}
```

Out[36]=
```
{-0.8, 0.8}
```

```
Table[ f[n], {n, list}]
```

In[37]:=
```
Table[FindFunc[n], {n, list}]
```

Out[37]=
```
{{x → -0.824132}, {x → 0.824132}}
```

Summary

1. FindRoot[function[x], {x, guess}]

2. Find the inersection between two graphs by taking one from the other

3. Define a function as so: FindFunc[guess_]:=FindRoot[f[x],{x,guess}] to easily change your guess.