

```

In[16]:= f[x_] = E^x + x^2 - 3;
y[0] = -2;
y[n_] := N[y[n - 1] - (f[y[n - 1]] / f'[y[n - 1]]), 10];
Table[N[y[n], 8], {n, 0, 7}]
N[FindRoot[f[x], {x, -2.5}], 20]

Out[19]= {-2.0000000, -1.7062267, -1.6775167, -1.6772327,
-1.6772327, -1.6772327, -1.6772327, -1.6772327}

Out[20]= {x -> -1.67723}

In[15]:= f[x_] = E^x + x^2 - 3;
y[0] = 1;
y[n_] := N[y[n - 1] - (f[y[n - 1]] / f'[y[n - 1]]), 10];
Table[N[y[n], 8], {n, 0, 7}]
N[FindRoot[f[x], {x, -2.5}], 20]

Out[18]= {1.0000000, 0.84776623, 0.83458147, 0.83448687,
0.83448687, 0.83448687, 0.83448687, 0.83448687}

Out[19]= {x -> -1.67723}

In[25]:= f[x_] = E^x + x^2 - 3;
y[0] = 2.5;
y[n_] := N[y[n - 1] - (f[y[n - 1]] / f'[y[n - 1]]), 20];
Table[N[y[n], 8], {n, 0, 7}]
N[FindRoot[f[x], {x, 2.5}], 20]

Out[28]= {2.5, 1.60185, 1.04733, 0.855826, 0.83473, 0.834487, 0.834487, 0.834487}

Out[29]= {x -> 0.834487}

```