con_sin.py Page 1/1 Saved: 12/2/18, 10:31:30 PM Printed for: Amanda Nguyen

```
1 # === cons sin.ipynb ===
2 #http://setosa.io/ev/sine-and-cosine/
3
4
  #%%
  %matplotlib notebook
6
7
  #%%
8 # Import Numpy for calculations and matplotlib for charting
9
  import numpy as np
10 | import matplotlib.pyplot as plt
11
12 | #%%
13 # The `np.arange()`, `np.sin()`, and `np.cos()` are all being
14 # used in order to create the lists for the application's charts
15
16 # Create our x_axis list
|x_{axis} = np.arange(0, 6, 0.1)
18
19 | #%%
20 # Creates a list based on the sin of our x_axis values
21 sin = np.sin(x_axis)
22
23 || #%%
24 # Creates a list based on the cos of our x_axis values
25 cos = np.cos(x_axis)
26
27 || #%%
28 # In order to chart multiple lines on the same chart, it is as simple as
29 # calling `plt.plot()` two times and providing PyPlot with different values
30
31 # Plot both of these lines so that they will appear on our final chart
32 plt.plot(x_axis, sin)
33 | plt.plot(x_axis, cos)
34
35 plt.show()
36
```