

1. BASICS

d) Multiple plots in a single graph

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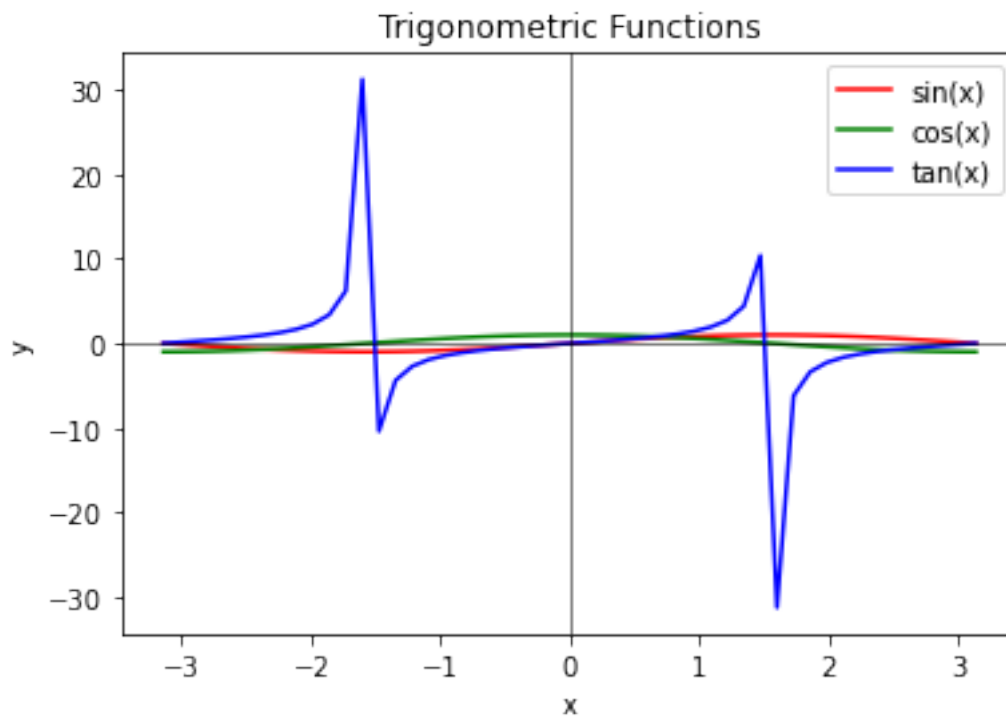
1 AIM

This is another addition to plotting recap. Here, instead of producing multiple plots as separate graphs, we will produce these plots in a single graph. In this record, we will produce multiple trigonometric functions in a single graph, range and domain.

```
[29]: import matplotlib.pyplot as plt
import numpy as np
x = np.linspace(-np.pi, np.pi, 50)
plt.plot(x, np.sin(x), color = "red", label = "sin(x)")
plt.plot(x, np.cos(x), color = "green", label = "cos(x)")
plt.plot(x, np.tan(x), color = "blue", label = "tan(x)")

plt.title('Trigonometric Functions')
plt.xlabel('x')
plt.ylabel('y')

plt.axhline(lw = 0.5, color = "black")
plt.axvline(lw = 0.5, color = "black")
plt.legend()
None
```



2 CONCLUSION

Multiple plots in a single graph are an effective way to compare the plots more closely and in a corresponding manner.