

Assignment1

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MSDA, SJSU , Data 220- Math Method for DA

Plot the following graph with sympy library (a) and b) graphs are separate graphs.)

a) $f(x)=2x^3-3x+4$ and $g(x)=5x-3$ the same graph (with title="my first graph")

```
[11]: from sympy import *
      from sympy.plotting import plot

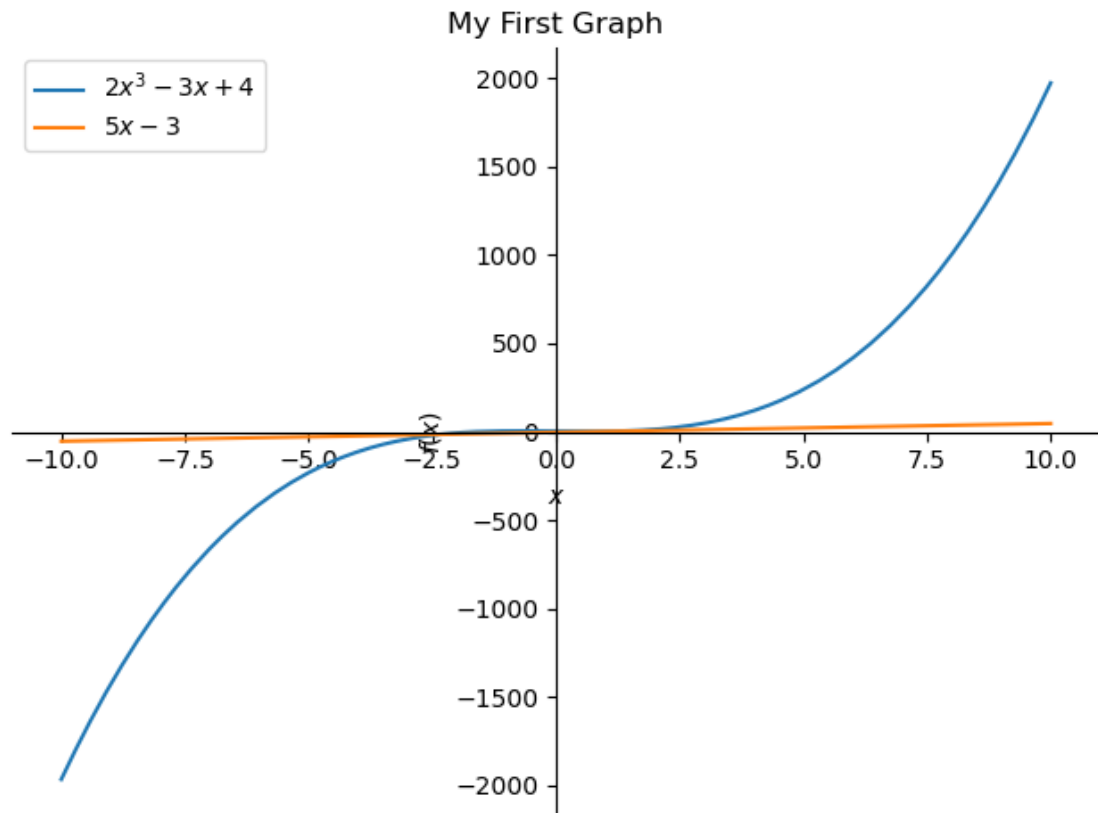
      # Create symbolic variable 'x'
      x=symbols('x')

      # Define the function you want to plot
      f = 2 * x**3 - 3 * x + 4
      g = 5 * x - 3

      # Create the plot
      p=plot(f,g, show=False,legend=True)

      # Set the title
      p.title = 'My First Graph'

      # Show the plot
      p.show()
```



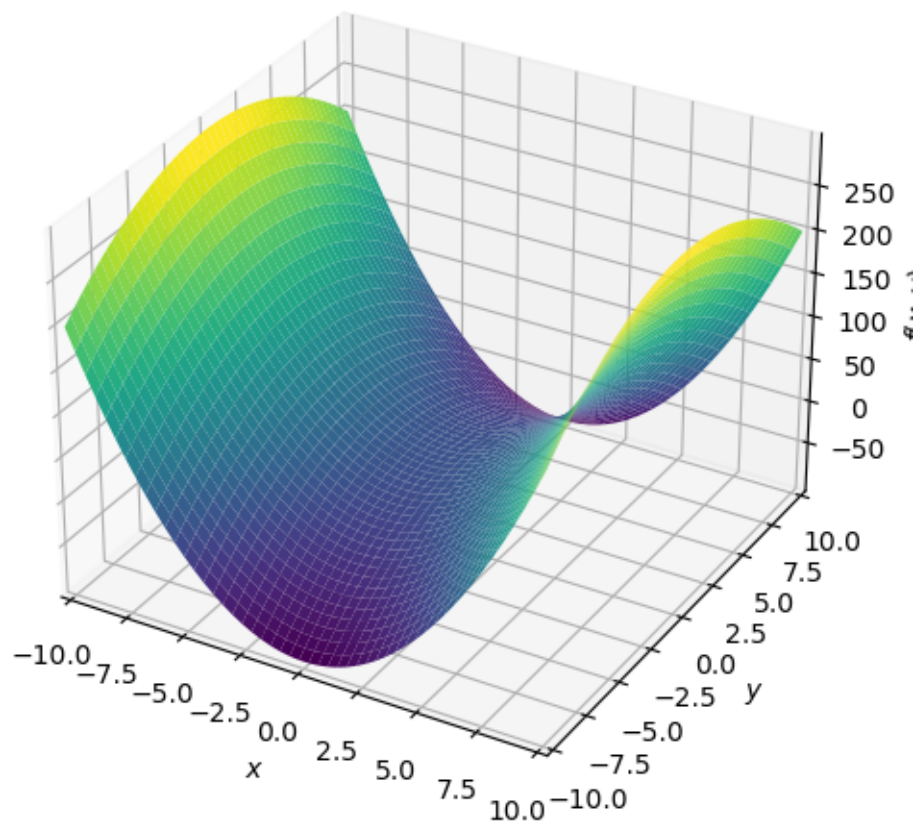
b) $z = 3x^2 - y^2$

```
[33]: from sympy import *
      from sympy.plotting import plot3d

      # Create symbolic variable 'x'
      x,y=symbols('x y')

      # Define the function you want to plot
      z = 3*x**2 - y**2

      #plot3d
      plot3d(z)
```



[33]: <sympy.plotting.plot.Plot at 0x2147fe4bad0>