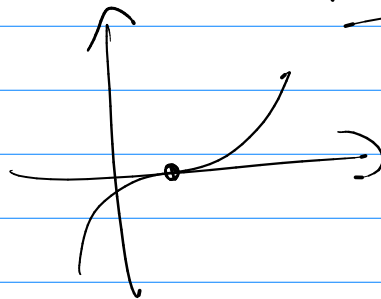
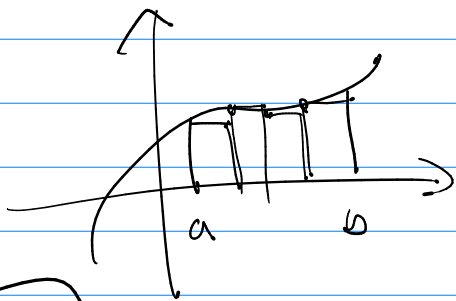


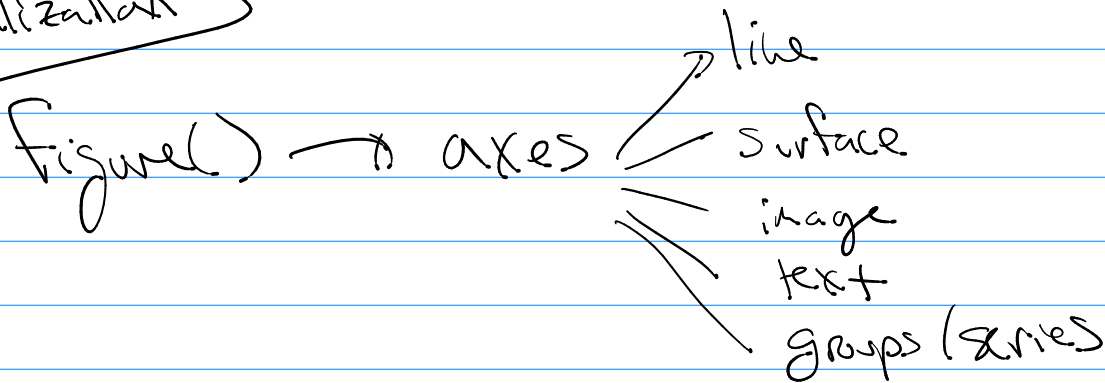
# Math 451

Q35/ Hw 5 , Project #2

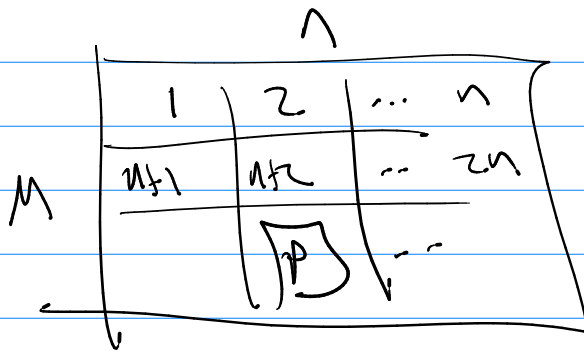
video on integration



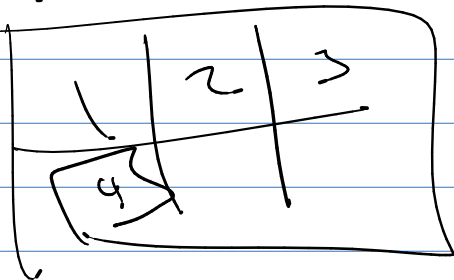
Visualization



→ subplot(M, n, (p))

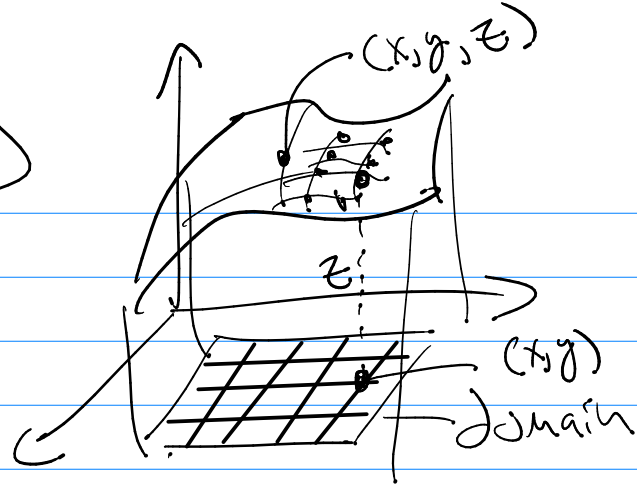


subplot(2, 3, 4)



→ axis, xline, yline, semilogx, semilogy, loglog  
 → legend(), xlabel(), ylabel(), title()

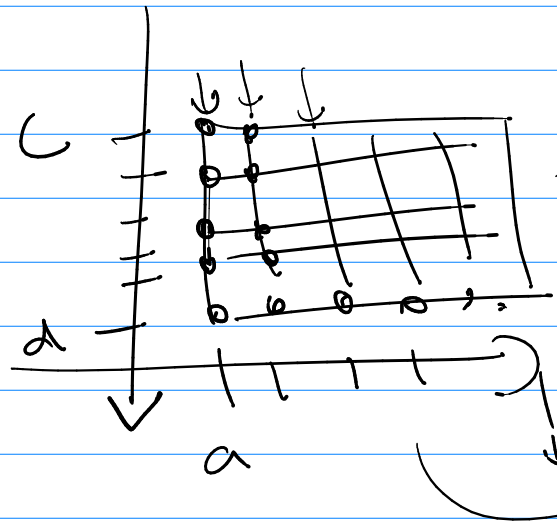
Surface



$$X = [x\text{-coord}]$$

$$Y = [y\text{-coord}]$$

$$Z = [z\text{-coord}]$$



$$y = \text{linspace}(c, d, m)$$

$$x = \text{linspace}(a, b, n)$$

$$[X \ Y] = \text{meshgrid}(x, y)$$

$$Z = f(X, Y)$$

Ex

$$f(x, y) = \sin(x^2 + y^2)$$

$$Z = \sin(X.^2 + Y.^2)$$

→ 3D surf(), mesh(), waterfall(), contour()