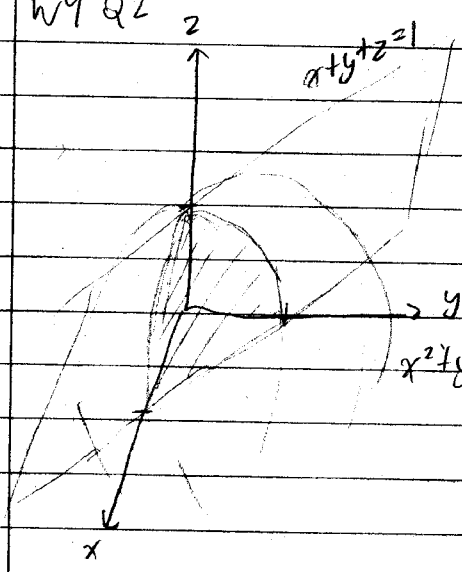
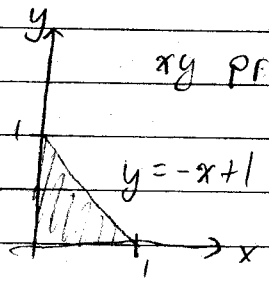
W9 Q2





$z_{min} = 1-x-y = 1-(x+y)$

$z_{max} = 1-x^2-y^2 = 1-(x^2+y^2)$

$$\int_{x=0}^{x=1}\int_{y=0}^{y=1-x}\int_{z=1-(x+y)}^{z=1-(x^2+y^2)} f\,dz\,dy\,dx$$

$$\therefore \int_{y=0}^{y=1}\int_{x=0}^{x=1-y}\int_{1-(x+y)}^{1-(x^2+y^2)} f\,dz\,dy\,dx$$