**MTH301 ASSIGNMENT 1 2021**

**BC200403287**

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**Question 1:**

**Find volume bounded by the planes and**

**Solution:**



Representing integral as an iterated integral:







**Question 2:**

**Let.  Calculate the gradient of  at the point (1, 3, −2) and calculate the directional derivative  at the point (1, 3, −2) in the direction of the vector v=(3,−1,4).**

**Solution:**



Put values in eq (1)



