

Partial Integrals

GROUP MEMBERS:

1. _____
2. _____
3. _____
4. _____

Problem: Learn how to calculate partial integrals. This is the key new idea in integrating functions of several variables.

Directions: Each person be sure to explain to the group what you are doing. Others in the group ask questions if you are not sure what the person is doing. In the first step, find calculate the anti-derivative; in the second step plug in the values at the endpoints.

Person 1: $\int_0^1 (x^2 y + 1) dx$

Person 2: $\int_0^1 (x^2 y + 1) dy$

Person 3: $\int_0^{\pi/2} y \sin(x) dx$

Person 4: Person 3: $\int_0^{\pi/2} y \sin(x) dy$