

## **12.1 Double Integrals over Rectangle**

### **Review of the Definite Integral**

### **Volumes and Double Integrals**

### Example 1

Estimate the volume that lies above the square  $R = [0,2] \times [0,2]$  and below the elliptic paraboloid  $z = 25 - x^2 - 2y^2$ .

### Average Value

### Properties of Double Integrals

HW # 1, 3, 9, 11, 13