exercise 1:
section 5.2: 77 - Sketch D and compute the integral.

exercise 2:
section 5.2: 78 - Express this region as a horizontally simple region then compute the integral.

exercise 3:
section 5.2: 85, 89.

exercise 4:
section 5.2: 102, 115.

exercise 5:
section 5.3: 122, 124, 134.

exercise 6:
section 5.3: 144, 148, 150.

exercise 7:
section 5.3: 158: the average of f over R is $\int_R f$/area of R.

exercise 8:
section 5.3: 154.

exercise 9:
section 5.3: 160, 161.

exercise 10:
section 5.6: 297, 302.

exercise 11:
section 5.6: 319: center of mass only.
** more exercises next page **

exercise 12:
Find the center of mass the homogeneous region defined by the inequalities $x \geq 0$, $y \geq 0$, $1 \leq x^2 + y^2 \leq 4$.