C3. Q103 (CH 15A) ASSIGNMENTS LIST

LESSON 1 (15.1, 15.2, 15.3) HOMEWORK/PRACTICE

Sketch the region bounded by the graphs of the given equations.

Express $\iint_R f(x, y) dA$ as $\iint_R f(x, y) dy dx$ and $\iint_R f(x, y) dx dy$

1.
$$y = \sqrt{x}$$
 $x = 4$ $y = 0$

2.
$$y = \sqrt{x}$$
 $x = 0$ $y = 2$

$$3. \quad y = \sqrt{x} \qquad y = x^3$$

4.
$$8y = x^3$$
 $y - x = 4$ $4x + y = 9$

- 5. Use a Double Integral to find the area bounded by y = x y = 3x x + y = 4
- 6. Find the volume of a lake whose surface is define by the region R in #5 and whose depth is defined by f(x, y) = x + y
- 7. Find the volume of the solid whose base is the region R bounded by $y^2 = -x$, x y = 4, y = -1 and y = 2 and whose height is f(x, y) = xy.

LESSON 2 (15.1, 15.2, 15.3) CLASS WORKSHOP/HW/PRACTICE

CLASS WORKSHOP (FINISH FOR HW):

Section 15.3: #5, 7, 17, 21, 43, 45, 51, 55;

Section 15.1 #1, 9;

Section 15.2, #9,17

LESSON 3 (15.9, 15.4) HOMEWORK/PRACTICE

Section 15.9 #21, 19, 13

Section 15.4: #1-6, 11, 13, 29

LESSON 4 ADDITIONAL REVIEW PRACTICE

Section 15.3 #58

Section 15.4 #35