# Calculus

### Date:

Items Needed: .Book,

**Objective:** The students will be able to determine the area of a region between two curves.

#### Lesson:

- Area between two curves is nothing more than the area of the upper curve minus the area of the lower curve. (That is if the curves do not intersect and it is just from an interval between a & b.)
- Do example 1.
- If the curves intersect, you must find the intersection points and your interval will be between those two points as long as the upper function and the lower function do not change.
- Do example 2, 3, & 4.
- Some functions may be easier to find the area by using the right function minus the left function. However, if you use this function you must make sure your functions are in terms of y before you start.
- Do example 5.

Assignment: .Have students do 5, 6, 21, 24, 27, 33, 36, 48, 49, 52, 79, 80, 93, 97, p. 454

## **Evaluation:** (Could be from any one/several of the following)

Responses from classroom questions Results of classroom sample problems Homework responses Check answer with Calculator End of the section exam

## **Enrichment:**