

## Chapter 0: Review and Preview

Upon successful completion of Chapter 0, the student should be able to:

State the two basic problems of calculus

Approximate a slope of a tangent line from a function given as a graph

Approximate the area of an irregular figure by counting inside squares

Calculate the slope of the line through two points

Write the equation of the line through two points (both slope-intercept and point-slope forms)

Write the equation of a circle with a given center and radius

Evaluate a function (given by a formula, graph, table or words) at a point

Evaluate a combination (+, -, \*, / and composition) of functions

Evaluate and graph the elementary functions as well as  $|x|$  and  $\text{INT}(x)$

State whether an element is a member of “A and B” and “A or B” for given sets A and B

State whether a given “If ... then ... “ statement is true or false and justify the answer

State which parts of a mathematical statement are assumptions (hypotheses) and which parts are conclusions.

State the contrapositive (equivalent) form of an “If ... then .. “ statement