## Reading Assignment 09

§9.1 (Arc Length and Surface Area)
NAME: $\qquad$

## Learning Objectives

By the end of this lesson, you will be able to:

- Compute arc length of curves
- Compute surface area of volumes of revolution


## REVIEW

- None.


## Reading

- Read section 9.1, but skip example 2 and example 3.


## Questions

(1) What is the formula for the arc length of a curve $f(x)$ over the interval $[a, b]$ ?
(2) Let $S$ be the solid obtained by rotating the graph of $f(x)$ over the interval $[a, b]$ around the $x$-axis. What is the formula for the surface area of $S$ ?

