

# 7

## APPLICATIONS OF INTEGRATION

---

### **7.1** Areas Between Curves

APPLIED PROJECT ■ The Gini Index

### **7.2** Volumes

DISCOVERY PROJECT ■ Rotating on a Slant

### **7.4** Arc Length

DISCOVERY PROJECT ■ Arc Length Contest

### **7.6** Applications to Physics and Engineering

APPLIED PROJECT ■ Calculus and Baseball

### **7.7** Differential Equations

APPLIED PROJECT ■ How Fast Does a Tank Drain?

APPLIED PROJECT ■ Which Is Faster, Going Up  
or Coming Down?