1. Be able to calculate \( \int_a^b f(x) \, dx \) using the FT version 1 (like 5.3 \# 3, 5, 7, 8, 17, 20, 21).

2. Know the interpretation of the integral in terms of rates of change and total change (like 5.3 \# 47, 49, 50, 60, 63).

3. Know the distinction between displacement and distance traveled, be able to calculate both (like 5.3 \# 55, 58).

4. Be able to state the two versions of the FT (see the box on page 381).

5. Be able to analyze \( \int_a^x f(t) \, dt \) using the FT (like 5.4 \# 2, 5, 7, 19).