

Chapter 14 Outline

Calculator Part

- Find acceleration, velocity, or displacement functions using derivatives or integrals (You would be given one of the three to start with) *like notes Ex. 10*
- Find initial displacement, velocity, or acceleration *like notes Ex. 10*
 - Given an initial displacement, velocity or acceleration, be able to find an expression for that function like Notes 14.4 #11b *like NonCalc #6*
- Find speed at a given time *like notes Ex. 11*
 - Find total distance during an interval
 - Set up and evaluate an integral for the area between 2 curves
 - Set up and evaluate an integral for the volume of a solid formed by rotating a curve.

Non-calculator Part

- Find derivatives using product rule, etc. Be able to use trig derivatives as well as older ones like e^x , etc
- Find integrals (definite and indefinite) using u substitution, etc. Be able to use trig integrals as well as older ones like $1/x$, etc
- Solve problems using tangent lines and normal lines (See notes 14.1 and Hmwk 14B) *- Review #4+5*

• Graph a function by hand similar to #4 in our 14.2 notes.

- Find x & y -intercepts
- Find increasing/decreasing intervals and min/max points.
- Find concave up/down intervals and inflection points.

• Be able to evaluate things like $\sin 0$ or $\cos 3\pi/4$ by hand

not in review!