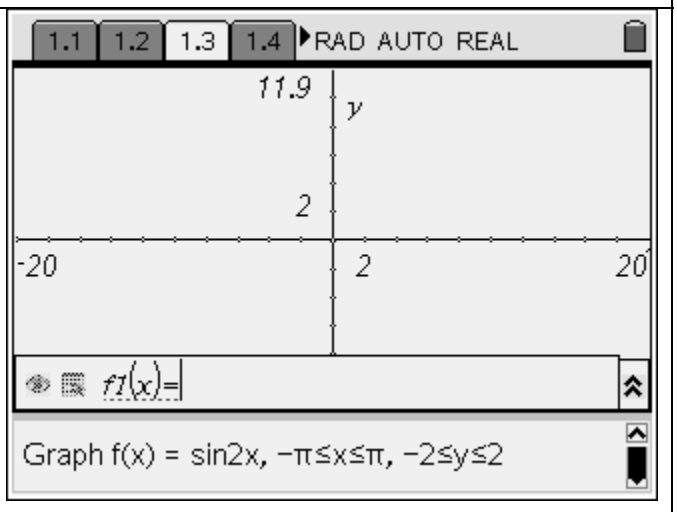
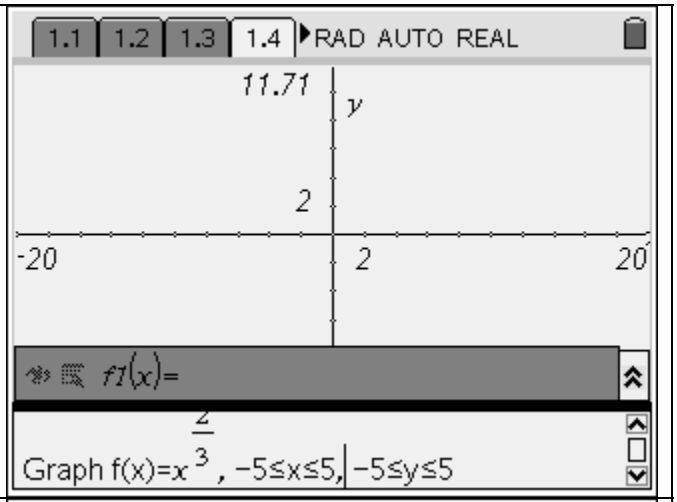
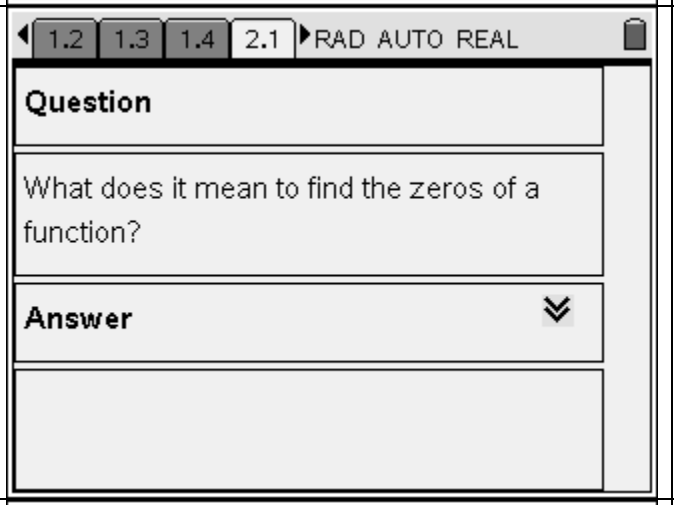
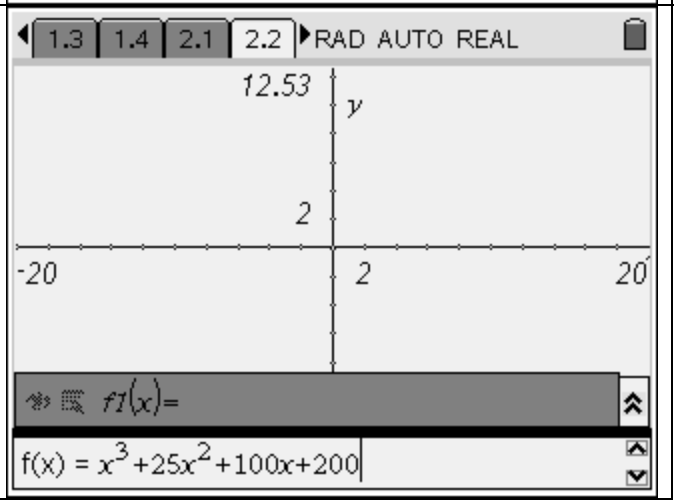
Name _____ Period _____

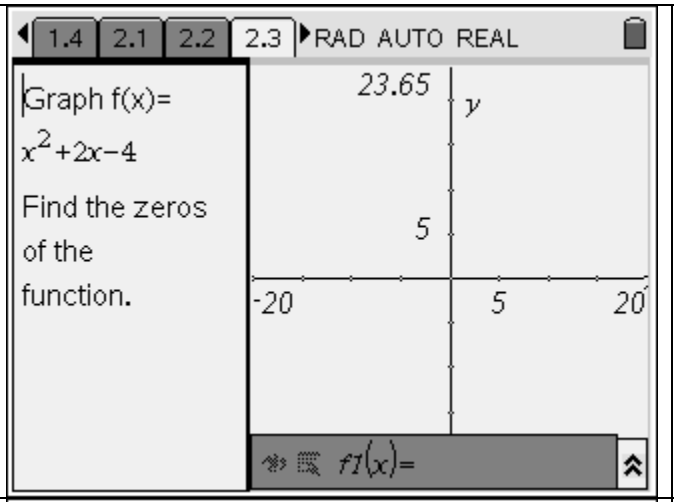
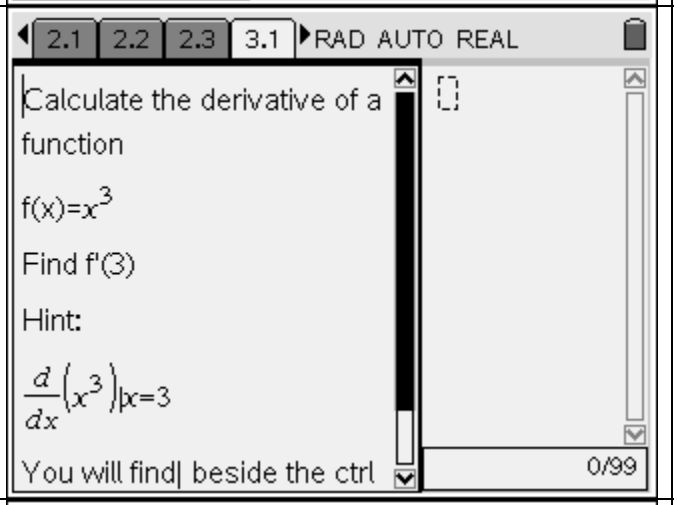
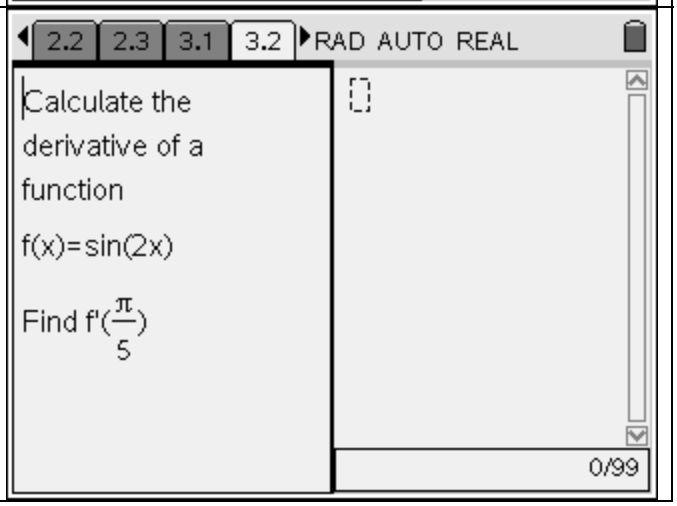
Conquer the Calculus Exam with the Nspire

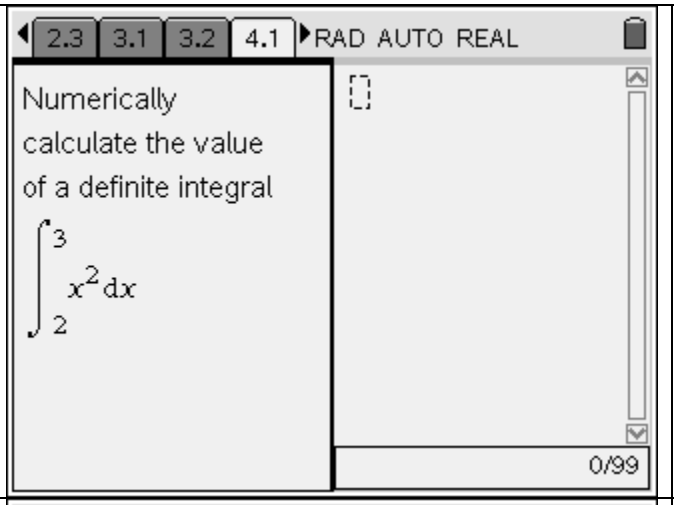
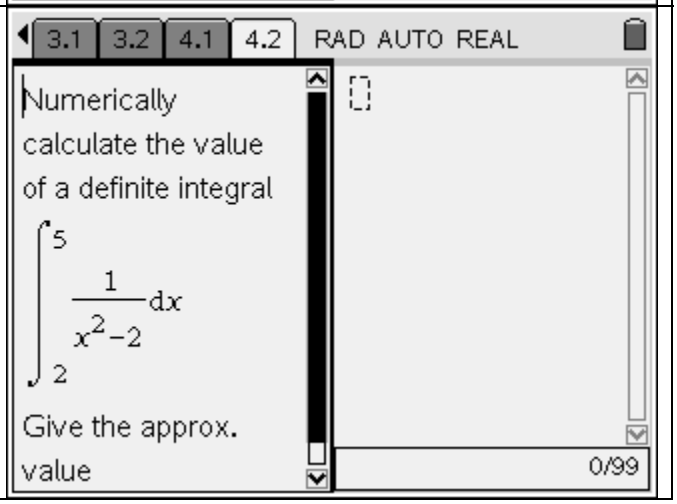
Materials: Nspire

Goal: Through this activity we will explore and practice the four necessary requirements with our Nspire calculator.

1. Go to the home screen and open the folder my documents.	
2. Open the document "Conquer the Calculus Exam with the Nspire". You will be able to manipulate between screens by using tab and the right and left arrows.	
3. Read the calculator requirements from screen 1.2	There are four situations for which you should be proficient on the graphing calculator. They are as follows: 1. Plotting the graph of a function within an arbitrary viewing window 2. Finding the zeros of a function 3. Calculate the derivative numerically 4. Calculate the value of a definite integral (numerically)
4. Go to screen 1.3 and follow the directions. You will need to change the window by selecting the menu. Go to 4: window – select 1:window settings and change the window Sketch the graph below.	

5. Go to screen 1.4 for more graphing practice. Sketch the graph below.	
6. Go to screen 2.1 and answer the question. _____ _____ _____ _____ _____ _____ _____ _____	
7. Go to screen 2.2 and graph the function f(x) = $x^3+25x^2+100x+200$. Adjust the window and find the zeros of the function. A point on the graph will need to be made first. Drag the point along the graph until a z appears. Record the zero. Zero _____	

8. Go to screen 2.3 for more practice with finding zeros. Zeros _____ _____	
9. Go to screen 3.1 to practice solving derivatives numerically. Follow the directions on the screen. $\frac{d}{dx}\left(x^3\right)$ at x = 3 is _____	
10. Go to screen 3.2 to practice another derivative problem. $\frac{d}{dx}\left(\sin(2x)\right)$ at x = $\frac{\pi}{5}$ is _____	

11. Go to screen 4.1 to practice solving integrals numerically. $\int_2^3 x^2 dx =$ _____	
12. Go to screen 4.2 to practice another integral problem. Give an approximate answer by using ctrl enter $\int_2^5 \frac{1}{x^2-2} dx =$ _____	

Now that you have practiced the 4 calculator requirements locate some problems in your textbook and practice.