Although graphing calculator commands vary from model to model, all graphing calculators perform the same basic tasks listed below. This list is just the beginning, but essential to all work that follows.

1. How do you adjust the contrast on your screen? Do it.

2. How do you enter and save a function to be graphed? Try $f(x) = \sqrt{20 - x^2}$.

3. Every calculator has a standard window. What is the size of your standard window?

4. How do you graph a function? Graph f(x) using the standard window.

5. How do you use the trace key? Use it to approximate the x-intercepts of f(x).

6. How do you change the size of the window? Change it to $-5 \le x \le 5$, $-5 \le y \le 10$.

- 7. How do you adjust the screen so that a graph does not appear distorted in the rectangular screen? Try it with f(x).
- 8. How do you graph a second function on top of the first? Try g(x) = 2x + 4.
- 9. How do you use the trace key to trace along either graph? Use the trace key to approximate one of the intersections of the two graphs. By the way, how would you find the intersection exactly?
- 10. How do you "turn off" a function, but still keep it in memory? Turn off g(x).
- 11. How do you zoom in and out? Try this with $h(x) = x \cdot 2^x$. (You should delete f(x) and g(x).)
- 12. How does the zoom box feature work? Try this with h(x). Focus on the low point of the graph that appears in Quadrant 3.

Try some of these features with other types of functions. Be sure to find keys such as the absolute value and root keys. Your calculator manual will be very helpful.