1. Without the use of your graphing calculator, sketch the graph of each function. Explain your reasoning in each case.

2. Without the use of your graphing calculator, match the following six rule types to describe the graph shape of algebra:

   (a) $y = ax + b$
   (b) $y = ax^2 + bx + c$
   (c) $y = ax^3 + bx^2 + cx + d$
   (d) $y = ax^4 + bx^3 + cx^2 + dx + e$
   (e) $y = ax^5 + bx^4 + cx^3 + dx^2 + ex + f$

   - Check Your Understanding:
   - Name: ____________

   Algebra 1
These activities are taken from Core-Plus Mathematics ©2008.

1) Initial
   - Exponential
   - Quadratic
   - Absolute Value
   - Linear

2) If we see a rule like ... we expect to get a graph like ... (describe graph)

3) If we see a rule like ... we expect to get a graph like ... (describe graph)

4) Summarizing: Summarize your conclusions in statements like these:
   - symbolic rules, statements of your conclusions in statements like these:
   - see from these rules, explain your reasoning in each case.

5) Without the use of your graphing calculator, sketch graphs you would expect to