## SECTION 3-2: THE DERIVATIVE AS A FUNCTION

- 1. Write the definition of f'(x), the derivative of the function f(x),
- 2. Let  $f(x) = \sqrt{x+5}$ .
  - (a) Use the definition of the derivative to find f'(x).

(b) Sketch f(x) and f'(x) on the same set of axes. (Use technology if you like.)

(c) Write the equation of the line tangent to f(x) at x = 0.

3. On the next page are several graphs. For each one, sketch the graph of f'(x) on the axes below.

