Homework 3

1. Find the derivative by the limit process.
$$f(x) = \sqrt{x+4}$$

2. Find the derivative of the function.
    (a)
    $$f(x) = x^2 - \frac{4}{x^3}$$
    (b)
    $$f(x) = \frac{1}{x} - 12\sec x$$
    (c)
    $$f(x) = -2\sqrt{3x^2 + 7}$$