Math 3B   Quiz 1

Name:_____   Section Time:_____

Complete the following problems, making sure to SHOW ALL WORK. If you're stuck on something, CLEARLY EXPLAINING what you do know or what you would do will get you partial credit!

1. Consider the function
$$f''(x) = \frac{4x^2 - 2\sqrt{x}}{x^2}.$$

   (a) Find the most general form for a function f such that $\frac{d^2 f}{dx^2} = f''$.

   (b) Now suppose $f(1) = 5$ and $f'(4) = 18$. Find the particular function f such that $\frac{d^2 f}{dx^2} = f''$.