Math 133, Quiz #3

1. Find the inverse function of

$$f(x) = \frac{1 + 5x}{2 - 3x}$$

2. If $g(x) = x + \sqrt{x}$, what is $g^{-1}(2)$?

3. Find

$$\lim_{x \to +\infty} e^{5 - x^5}$$

4. Let $h(x) = \sqrt{\log_{10} x}$. Calculate $h'(x)$ and write your answer using only the natural logarithm, not logarithm to the base 10.