Name: _____

- 1. Differentiate the given function.
 - (a) **[2 points]** $f(x) = (3x^8 10x^2 + 4)^5$

(b) **[3 points]**
$$f(x) = \sqrt{\frac{x^2 + 1}{2x + 5}}$$

 $\mathbf{OVER} \rightarrow$

2. (a) [3 points] Differentiate the given function. Simplify your answer. $f(x) = 5(6-x)^4(2x-1)^3$

(b) [2 points] Find all values of x at which the tangent line is horizontal.