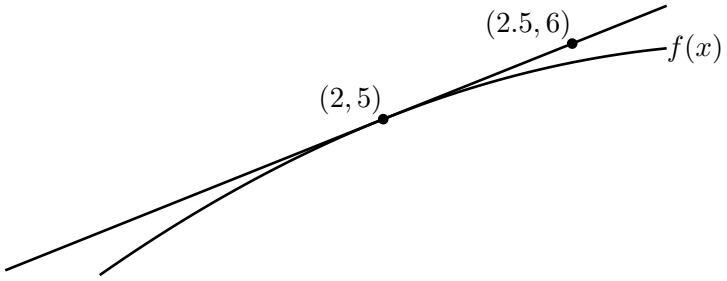
3. The figure below shows a differentiable function f and the line tangent to the graph at the point $(2, 5)$: (*picture not drawn to scale*)



(a) (3 points) Approximate $f(2.01)$. Is your approximation an over or underestimate? Explain.

(b) (3 points) Evaluate $h'(2)$ if $h(x) = \Big(f(x)\Big)^3$.

(c) (3 points) Evaluate $g'(2)$ if $g(x) = e^{f(x)}$.