6. (12 points) For this problem f is differentiable everywhere.

(a) Let $g(x) = f(x - 2)$. Describe the graph of $g(x)$ in terms of the graph of $f(x)$.

(b) If $f'(1) = 6$, what is $g'(3)$? Don't do any calculations here, use the geometry of the situation from part (a) to arrive at your answer.

(c) State the limit definition of the derivative for the function f.

(d) Let $j(x) = f(x) + 10$. Use the limit definition of the derivative to calculate the derivative of j in terms of the derivative of f.