5. (12 points) For parts (a) - (c), on the graphs below, show a graphical interpretation for each of the given expressions, and then explain how the quantities given by the expression relate to your drawings on the graphs.
(a) $\int_{a}^{c} f(x) d x$

(b) $f^{\prime}(a)$

(c) $\frac{f(c)-f(a)}{c-a}$

