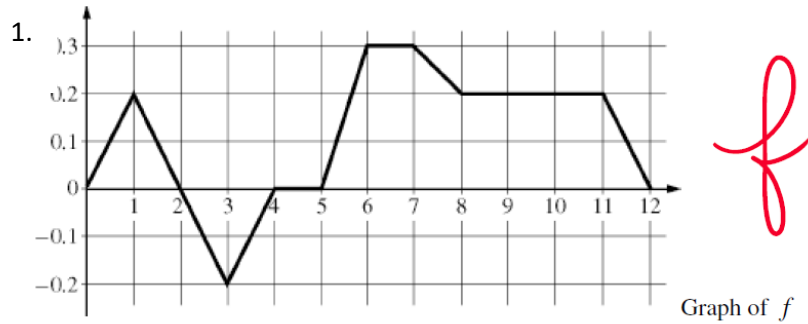


HW on Application of Fundamental Theorem of Calculus



Let f be the function shown above. The function g is defined by $\int_0^x f(t) dt$

Find: $g(0)$, $g(4)$, $g(12)$

Find $g'(x)$

Find $g'(2)$

Find $g''(2)$

Write the equation of the line tangent to the graph of g at $x = 1$

2. Let $g(x) = \int_0^x f(t) dt$, where f is the function whose graph is shown.

(a) Evaluate $g(0)$, $g(1)$, $g(2)$, and $g(6)$.

(b) On what intervals is g increasing?

(c) Where does g have a maximum value? What is the maximum value?

(d) Where does g have a minimum value? What is the minimum value?

