

1. Given the table of data, and given  $f(30) = 100$ .

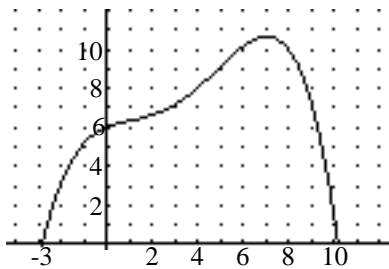
x	10	20	30	40	50
$f'(x)$	30	50	60	50	20

a. Find:  $f(50)$

b. Find:  $f''(40)$

c. Find:  $\int_{40}^{50} f'(x) dx$

2. Given the graph of  $f'(x)$  defined on  $-3 \leq x \leq 10$ .  $f(4) = 6$



a. Find: The x-value(s) for the point(s) of inflection for  $f(x)$

b. Find:  $f(5)$

c. Find:  $f''(5)$

d. Find:  $\frac{d}{dx} \int_4^{2x} f'(x) dx$  at  $x = 4$