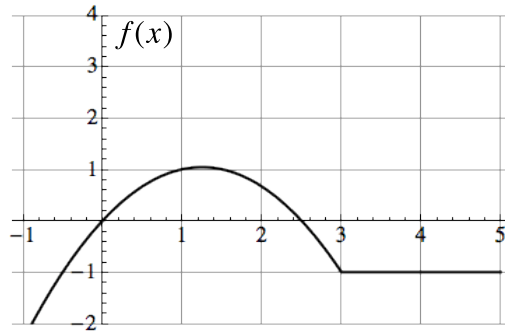


3. (35 points) The graph of  $f(x)$  on  $[0,4]$  is shown below. You may want to refer to it to answer the following questions.

a. What is  $\int_0^4 x f'(x) dx$ ?



b. What is  $\int_0^2 x f'(x^2) dx$ ?