

2. (4 points each) Suppose that f , g and h are continuous and differentiable functions such that $f'(x) = g(x)$ and **ALL** of the following conditions are also true:

$$\int_0^5 f(x)dx = -2,$$

$$\int_5^{10} g(x)dx = 2,$$

$$\int_0^5 g(x)dx = 15,$$

$$f(0) = 7,$$

$$h(x) = g(x - 5)$$

For parts (a)-(f), find the numerical value indicated. If insufficient information is given to answer the question indicate "Insufficient information".

(a) $\int_0^5 f(0)g(x)dx =$

(b) $f(10) =$

(c) $\int_0^5 |f(x)| dx =$

(d) $\int_0^5 \left(3f(0) - \frac{g(x)}{5} \right) dx =$

(e) $\int_0^5 \frac{1}{g(x)} dx =$

(f) $\int_5^{10} h(x)dx =$