

(2.) (12 points) Given the following:

- f is an *even* function such that $\int_0^1 f(x) dx = 5$,
- g is an *odd* function such that $\int_0^1 g(x) dx = 7$.

Compute the following definite integrals. If you do not have enough information for a given computation, write “not enough information.”

(a) $\int_0^1 (f(x) - g(x)) dx =$

(b) $\int_0^1 3g(x) dx =$

(c) $\int_0^1 f(x) \cdot g(x) dx =$

(d) $\int_3^4 f(x - 3) dx =$

(e) $\int_{-1}^1 (f(x) + g(x)) dx =$

(f) $\int_0^1 f(g(x)) dx =$