2. (12 points) Suppose that f and g are continuous functions and $\int_0^2 f(x)dx = 5$ and $\int_0^2 g(x)dx = 13$. Compute the following. If the computation cannot be made because something is missing, explain clearly what is missing.

(a) $\int_4^6 f(x-4)dx$

(b) $\int_{-2}^0 2g(-t)dt$

(c) $\int_2^0 (f(y)+2)dy$

(d) $\int_2^2 g(x)dx$

(e) Suppose that f is an even function. Compute the average value of f from -2 to 2.