

1. [10 points] Suppose that  $f(x)$  is an odd function,  $g(x)$  is an even function, and

•  $\int_3^8 f(x)dx = 4$

•  $\int_0^8 f(x)dx = 10$

•  $\int_3^8 g(x)dx = -2$

•  $\int_{-3}^3 g(x)dx = 5$

Determine each of the following quantities, if possible. If there is not enough information to determine the answer, then write "NI" in the space provided. You do not need to show your work for this page.

a. [2 points] Evaluate  $\int_3^8 (f(x) - 3g(x))dx$ .

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b. [2 points] Evaluate  $\int_{-8}^0 g(x)dx$ .

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c. [2 points] Evaluate  $\int_3^8 f(x)g(x)dx$ .

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d. [2 points] Evaluate  $\int_{-2}^0 f(4x)dx$ .

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e. [2 points] Evaluate  $\int_0^3 (f(x) + 4)dx$ .

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