

2. [18 points] The table below provides some values for the functions h and H , where

- $h(t)$ is an **odd** function, with continuous first derivative.
- $H(t)$ is an antiderivative of $h(t)$.

t	1	2	3	4	5
$h(t)$	-8	1	-2	4	$\sqrt{\pi}$
$H(t)$	-3	0	-5	3	6

Use the table above to compute the following integrals. Write your answers using **exact form** on the blank provided. If there is not enough information to answer a question, write “N.I.” Evaluate all integrals. You do not need to simplify your answers, but the letters h or H should not appear in your final answers.

a. [4 points] $\int_{-4}^4 h'(t) dt$

Answer: _____

b. [4 points] $\int_3^2 th'(t) dt$

Answer: _____

c. [4 points] $\int_1^2 \frac{\cos((h(t))^{\frac{1}{3}})}{(h(t))^{\frac{2}{3}}} h'(t) dt$

Answer: _____

d. [6 points] $\int_2^5 \frac{h(t)}{1 + (h(t))^4} h'(t) dt$

Answer: _____