

3. [16 points] Use the table below to answer the following questions. Write your answers using **exact form** on the blank provided. If there is not enough information to complete the problem, write N.I. You need to evaluate all integrals completely, but you do not need to simplify your final answers.

t	0	1	2	3	4	5
$f(t)$	3	2	5	e	7	0
$f'(t)$	-1	-4	3	2	π	1
$f''(t)$	2	8	1	2	6	2

a. [4 points] MID(2) for $\int_1^5 f(t)dt$

Answer: _____.

b. [4 points] TRAP (2) for $\int_0^4 t f'(t)dt$

Answer: _____.

c. [4 points] Average value of $f'(2t)$ on $[0, 2]$

Answer: _____.

d. [4 points] Second degree Taylor Polynomial of $f(-x)$ around $x = -2$.

Answer: _____.