Problem statement The only information known about a function T and its derivatives is contained in this table:

a) Compute $\int_2^3 T'(x)\,dx$.

b) Compute $\int_2^3 T''(x)\,dx$.

c) Compute $\int_2^3 x\,dx$.

d) Compute $\int_2^3 xT''(x)\,dx$. Don't look at b) and c)! Integrate by parts.

e) Compute $\int_2^3 x^2 T'''(x)\,dx$. And again and again.

x	$T(x)$	$T'(x)$	$T''(x)$
1	2	-2	2
2	3	6	5
3	7	4	-4
4	2	5	7