

8. [12 points] Some values of the continuous, differentiable function $g(x)$ are given in the table below.

x	1	5/4	3/2	7/4	2
$g(x)$	2	3	4	7	10

- a. [6 points] Estimate the integral $\int_1^4 \frac{g(\sqrt{t})}{\sqrt{t}} dt$ using these data.

- b. [6 points] Estimate the integral $\int_1^4 g(\sqrt{t}) dt$ using these data.