1. [16 points] For this problem, $\int_1^5 g(x)\,dx = 12$, and $f(x) = 2x - 9$. Values of $g(x)$ are given in the table below.

x	1	2	3	4	5
$g(x)$	0.1	1.5	2	5	10

(a) [5 points of 16] Find $\int_5^7 g(f(x))\,dx$

(b) [5 points of 16] Find $\int_1^5 f(x) \cdot g'(x)\,dx$.

(c) [6 points of 16] Find $\int_1^5 \frac{g'(x)}{g(x)(g(x)+1)}\,dx$.