4. (10 points) Let f be a continuous differentiable function of x. Suppose f is always increasing. The following is a table of values of $f(x)$.

x	.8	.9	1	1.1	1.2	1.3	1.4	1.5
$f(x)$	3	25	26	27	49	52	62	63

(a) Using the table above, give an approximation of $f'(1)$.

(b) Would a left-hand or a right-hand sum give a lower estimate of $\int_1^{1.5} f(x)dx$? Why?

(c) Using the table above, give upper and lower estimates of $\int_1^{1.5} f(x)dx$.