7. Table 1 below shows some values of the function $f(x)$. Assume that both f' and f'' are defined on $[-1, 7]$.

Table 1

x	0	1	2	3	4	5	6
$f(x)$	-2	1	5	12	15	16	13

Table 2

x	0	1	2	3	4	5	6
$f'(x)$							

(a) (4 points) Use the data given in Table 1 to fill in approximate values of f' in Table 2. Possible answers (depending on whether one takes left, right, or averages) are:

x	0	1	2	3	4	5	6
$f'(x)$	3	4	7	3	1	-3	

x	0	1	2	3	4	5	6
$f'(x)$		3	4	7	3	1	-3

x	0	1	2	3	4	5	6
$f'(x)$		3.5	5.5	5	2	-1	

[Only the intermediate points on the table were checked on this portion of the problem.]

(b) (1 point) Where does the rate of change of f seem greatest?

Anywhere in $[2, 3]$ is acceptable.

(c) (2 points) What is the largest interval over which the table indicates that f is concave up?

$(0, 3)$