6. [14 points] Let p be a function such that $p''(x)$ is defined for all real numbers x. A table of some values of $p'(x)$ is given below.

x	-9	-5	-1	3	7	11
$p'(x)$	-3	0	-4	0	2	1

Assume that p' is either always strictly decreasing or always strictly increasing between consecutive values of x shown in the table.

For each of the questions below, circle ALL of the appropriate choices. If none of the choices are correct, circle NONE OF THESE.

a. [2 points] At which, if any, of the following values of x does $p(x)$ definitely have a local maximum in the interval $-9 < x < 11$?

-5 -1 3 7 NONE OF THESE

b. [2 points] At which, if any, of the following values of x does $p(x)$ definitely attain its global minimum on the interval $-9 \leq x \leq 11$?

-9 -5 -1 3 7 11 NONE OF THESE

c. [2 points] At which, if any, of the following values of x does $p'(x)$ (the derivative of $p(x)$) definitely attain its global maximum on the interval $-9 \leq x \leq 11$?

-9 -5 -1 3 7 11 NONE OF THESE

d. [3 points] On which of the following intervals is $p(x)$ definitely always concave up?

$-9 < x < -5$ $-5 < x < -1$ $-1 < x < 3$ $3 < x < 7$ $7 < x < 11$ NONE OF THESE

e. [3 points] At which, if any, of the following values of x does $p(x)$ definitely have an inflection point in the interval$-9 < x < 11$?

-5 -1 3 7 NONE OF THESE

f. [2 points] Which, if any, of the following must be true?

$p''(7) \geq p''(-3)$ $p''(7) = p''(-3)$ $p''(7) \leq p''(-3)$ NONE OF THESE