



Name: _____

Find the 1st, 3rd, 5th and 10th terms of the following quadratic nth term sequences

	1 st Term	3 rd Term	5 th Term	10 th Term
a) $n^2 + 3$	4	12	28	103
b) $2n^2$	2	18	50	200
c) $n^2 + 3n$	4	18	40	130
d) $n^2 - 2n$	-1	3	15	80
e) $n^2 + 5n - 5$	1	19	45	145
f) $n^2 - 3n + 1$	-1	1	11	71
g) $2n^2 + 3n - 7$	-2	20	58	223
g) $3n^2 - n + 2$	4	26	72	292

Find if the following numbers are in the given sequences, and if so, which position in the sequence?

h) Is 117 in $n^2 - 4n$?Yes, $n = 13$ i) Is 132 in $n^2 + n$?Yes, $n = 11$ j) Is 116 in $n^2 - 2n + 4$?No, $n = 11.630$ k) Is 74 in $n^2 - n$?No, $n = 9.117$ l) Is 134 in $2n^2 - 4n + 8$?Yes, $n = 9$

Exam question:

The nth term of a sequence is: $2n^2 + 4n - 1$
 Work out the 10th term of the sequence

$$2(10)^2 + 4(10) - 1 = 239$$

