Nth Term of Quadratic Sequences

Find the nth term of these sequences:

(a) $8, 11, 16, 23, \ldots$

(b) $-4, -1, 4, 11, \ldots$

(c) $6, 12, 22, 36, \ldots$

(d) $-1, 5, 15, 29, ..$

(e) $4, 13, 28, 49, \ldots$

(f) $2, 14, 34, 62, \ldots$

(a) n^2+7
(b) n^2-5
(c) $2n^2+4$
(d) $2n^2-3$
(e) $3n^2+1$
(f) $4n^2-2$

Find the nth term of these sequences:

(a) $3, 7, 13, 21, \ldots$

(b) $2, 7, 14, 23, \ldots$

(c) $9, 18, 31, 48, \ldots$

(d) $1, 5, 13, 25, \ldots$

(e) $7, 23, 49, 85, \ldots$

(f) $7, 15, 29, 49, \ldots$

(a) n^2+n+1
(b) n^2+2n+1
(c) $2n^2+3n+4$
(d) $2n^2-2n+1$
(e) $5n^2+n+1$
(f) $3n^2-n+5$

Find the nth term of these sequences:

(a) $10.5, 12, 14.5, 18, \ldots$

(b) $5.5, 9, 13.5, 19, \ldots$

(c) $1.5, 5, 11.5, 21, \ldots$

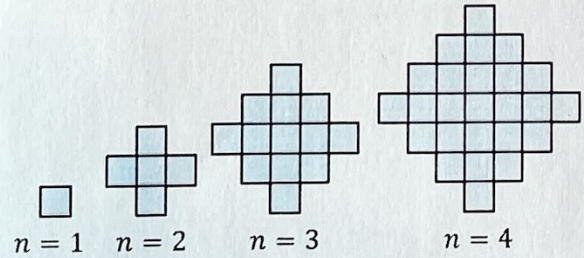
(d) $3.5, 10, 19.5, 32, \ldots$

(e) $19, 16, 11, 4, -5, \ldots$

(f) $5, 6, 5, 2, -3, \ldots$

(a) $0.5n^2+10$
(b) $0.5n^2+2n+3$
(c) $1.5n^2-n+1$
(d) $1.5n^2+2n$
(e) $-n^2+20$
(f) $-n^2+4n+2$

The number of squares in each of these shapes form a quadratic sequence. Find the nth term for this sequence.



$2n^2-2n+1$

1 5 13 25

+4 +8 +12